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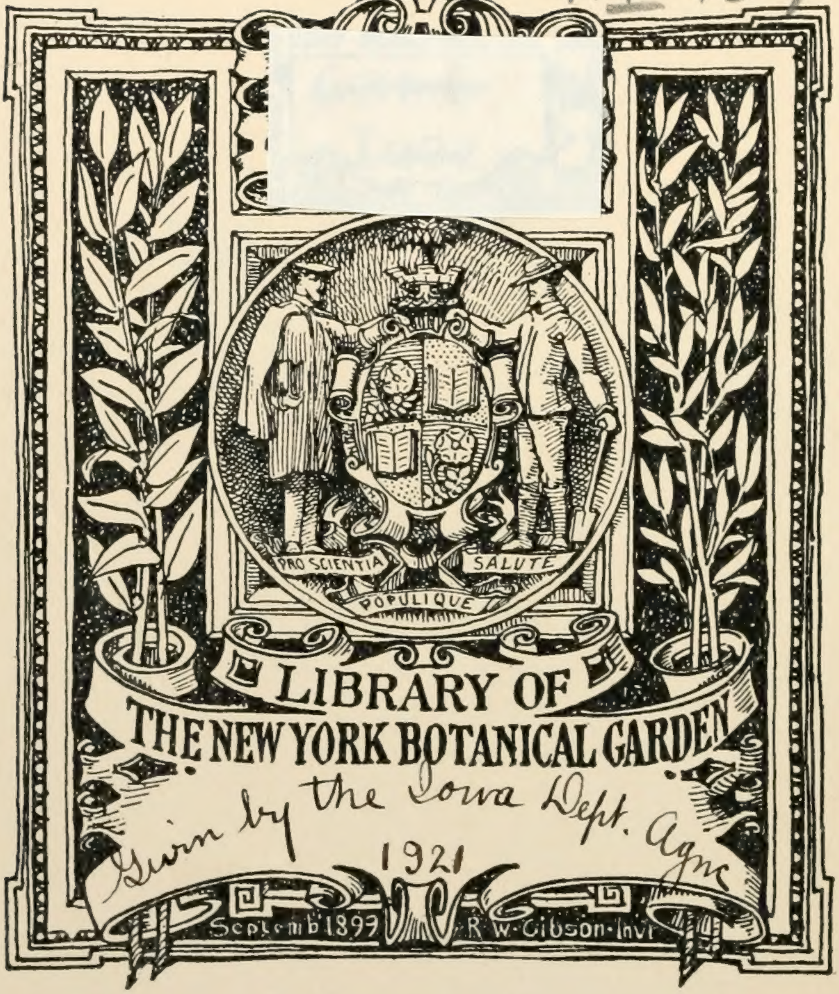
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TWENTIETH ANNUAL

IOWA YEAR BOOK OF AGRICULTURE

ISSUED BY THE

IOWA DEPARTMENT OF AGRICULTURE

1919

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THE STATE OF IOWA
Des Moines

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1919

LETTER OF TRANSMITTAL

OFFICE OF IOWA STATE DEPARTMENT OF
AGRICULTURE.

Des Moines, Iowa, July 1, 1920.

To His Excellency, W. L. Harding, Governor of Iowa:

Sir: I have the honor to transmit herewith the Twentieth Annual Iowa Year Book of Agriculture for the year 1919.

ARTHUR R. COREY,
Secretary State Board of Agriculture.

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INTRODUCTORY

Volume Twenty of the Iowa Year Book of Agriculture covering the year of 1919 is presented herewith in ten parts. Following is a summary of the contents of the various sections of the book:

Part One contains a record of all the board, executive and special committee meetings of the Iowa State Board of Agriculture held during the year 1919.

Part Two carries a complete report of the annual State Agricultural Convention. It includes a report by the secretary of agriculture concerning the transactions of the department for the year; an itemized statistical statement of the receipts and disbursements of the state fair and statistical data pertaining to attendance, exhibits, etc.; a report of the Stallion Registration Division; and a report covering the county and district fairs, together with their attendance, receipts and disbursements.

The report of the Treasurer and President of the Board of Agriculture are contained in Part Two, together with a report of the election of officers to the board for the year.

Part Three details the proceedings of the twelfth annual meeting of the Iowa Fair Managers' Association, containing a stenographic report of all addresses and discussions taking place during the convention.

Part Four is an official report of the live stock awards for the 1919 Iowa State Fair. It also carries comments made by farm and live stock papers concerning the 1919 fair.

Part Five is the official report of the Secretary of the Iowa Farm Bureau Federation and a detailed statement of the first annual convention of the organization held in Des Moines January 8-9, 1920.

Part Six is a partial reprint of the report of the Dairy and Food Commissioner, covering the transactions of the department and statistical data on the work of the various creameries of the state. It also contains the account of the living cost investigation carried on by this department. A number of papers of interest to dairymen are presented.

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Part Seven contains excerpts from the proceedings of the annual meeting of the Corn Belt Meat Producers' Association and discussions of questions covering live stock marketing in Iowa.

Part Eight is a reprint of the annual report of the Iowa Weather and Crop Service Bureau. It includes a summary and monthly review of the climatology for the year; a review of the crop conditions by months; a tabulated crop summary showing production and value of Iowa's farm crops and a tabulation giving average yields and total production of the principal farm crops by counties.

Part Nine consists of tables containing the farm and crop statistics by counties, collected by the township assessors and reported to the Department of Agriculture by the County Auditors. In co-operation with the Iowa Weather and Crop Service Bureau the assessors' books were verified and numerous errors in addition, carrying amounts forward, etc., were corrected. These statistics present a correct tabulation of the returns made by the township assessors after all apparent errors were corrected. Special attention is called to the statistics showing modern farm homes, automobiles, trucks, silos, tractors, etc.

Part Ten includes a series of tables showing the average yield, total production and total value of the principal farm crops for a period of twenty-three years. For reference purposes there is also a group of tables showing crop and live stock statistics from the 1919 Year Book of the United States Department of Agriculture. These statistics cover classifications by states for the United States and by countries for the world.

STATE BOARD OF AGRICULTURE

1920

EX-OFFICIO MEMBERS

W. L. Harding, *Governor of State*	Des Moines
R. A. Pearson, *President Iowa State College*	Ames
W. B. Barney, *State Dairy Commissioner*	Des Moines
Robt. D. Wall, *State Veterinarian*	Des Moines

OFFICERS

C. E. Cameron, *President*	Alta
J. P. Mullen, *Vice President*	Fonda
A. R. Corey, *Secretary*	Des Moines
W. W. Morrow, *Treasurer*	Afton

DISTRICT MEMBERS

First District—H. O. Weaver	Wapello
Second District—E. T. Davis	Iowa City
Third District—E. M. Reeves	Waverly
Fourth District—E. J. Curtin	Decorah
Fifth District—Cyrus A. Tow	Norway
Sixth District—T. C. Legoe	What Cheer
Seventh District—C. F. Curtiss	Ames
Eighth District—Frank E. Sheldon	Mt. Ayr
Ninth District—Chas. Escher, Jr.	Botna
Tenth District—Sears McHenry	Denison
Eleventh District—H. L. Pike	Whiting

The President, Vice President, Secretary and Treasurer are elected for one year.

Terms of the Directors for odd-numbered Districts expire second Wednesday in December, 1919. Terms of Directors from even-numbered Districts expire second Wednesday in December, 1920.

STANDING COMMITTEES

Executive

C. E. Cameron
J. P. Mullen
A. R. Corey

Auditing

F. E. Sheldon
E. M. Reeves
H. L. Pike

Resolutions

E. J. Curtin
H. O. Weaver
T. C. Legoe

Powers and Duties of Board

C. E. Cameron
J. P. Mullen
A. R. Corey
E. M. Reeves
C. F. Curtiss

Adulteration of Foods, Seeds and Other Products

R. A. Pearson
C. A Tow
W. B. Barney

Noxious Weeds, Fungus Diseases in Grains, Grasses, Etc.

E. M. Reeves
Chas. Escher, Jr.
E. T. Davis

Dairying and Dairy Products

W. B. Barney
C. F. Curtiss
Sears McHenry

Animal Husbandry

C. F. Curtiss
E. T. Davis
R. D. Wall

Legislative

C. E. Cameron
J. P. Mullen
A. R. Corey
H. O. Weaver
E. J. Curtin

Revision of Premium List

C. E. Cameron
J. P. Mullen
A. R. Corey
T. C. Legoe
C. F. Curtiss
H. L. Pike

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PART IV.

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PART V.

Report of the Iowa Farm Bureau Federation and of the first annual convention held January 8-9, 1920.

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PART VII.

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PART VIII.

Annual Report of the Iowa Weather and Crop Service Bureau for 1919.

PART IX.

Farm Statistics for the year ending December 31, 1919. Collected by township assessors and reported to the Department of Agriculture by the County Auditors.

PART X.

Statistical Tables of Iowa's principal farm crops. Also statistical tables of farm crops and live stock by states, the United States and the World.

IOWA'S SOURCE OF WEALTH

DECEMBER 31, 1919.

Compiled for the Iowa Year Book of Agriculture from Estimates Furnished by the Iowa Co-operative Crop Reporting Service, Showing Acreage, Average Yield and Total Yield of Farm Products.

Crop	Acres	Average Yield	Average Price	Total Yield	Total Value
Corn	10,000,000	41.6 bu.	$ 1.17	416,622,000	$487,447,740
Oats	5,670,000	34.6 bu.	.64	196,391,500	125,690,560
Spring Wheat	750,000	9.5 bu.	1.89	7,145,300	13,504,617
Winter Wheat	950,000	17.4 bu.	1.98	16,508,600	32,687,028
Barley	315,000	25.5 bu.	1.11	8,022,800	8,905,308
Rye	*70,000	15.9 bu.	1.33	1,110,050	1,476,366
Flax Seed	16,000	9.5 bu.	3.90	152,275	593,872
Timothy Seed	200,000	4.5 bu.	4.91	900,000	4,419,000
Clover Seed	60,000	1.4 bu.	24.92	84,000	2,093,280
Potatoes	115,000	43.0 bu.	1.94	4,942,110	9,587,693
Hay (Tame)	2,992,000	1.6 tons	18.37	4,957,370	91,066,887
Hay (Wild)	478,000	1.3 tons	16.48	631,693	10,410,301
Alfalfa	148,000	3.2 tons	23.09	477,314	11,021,180
Pasturage and grazing (estim'd)					100,000,000
Ensilage (estimated)					20,000,000
Sweet Corn (Commercial Crop)	40,000	3.0 tons	13.50	120,000	1,620,000
Pop Corn (estimated)	29,300	24.9 bu.	3.79	729,570	2,765,070
Buckwheat (estimated)	7,000	14.0 bu.	1.95	98,000	191,100
Fruit Crop (estimated)					7,000,000
Garden Truck (estimated)					8,000,000
Sugar Beets for Manufacture (estimated)	8,000	8.0 tons	9.00	64,000	576,000
Miscellaneous (estimated)					11,000,000
Total					$ 950,056,002
Dairy products (estimated)					$ 113,000,000
Poultry and Eggs (estimated)					85,000,000
Wool, 4,500,000 at 55c					2,475,000
Total value of farm products					$1,150,531,002

NUMBER, AVERAGE VALUE AND TOTAL VALUE OF LIVE STOCK

DECEMBER 31, 1919.

Figures taken from estimates made by the United States Department of Agriculture.

	Number	Average Value	Total Value
Horses	1,505,000	$ 89.00	$ 133,945,000
Mules	71,000	121.00	8,591,000
Milch Cows	1,363,000	88.00	119,944,000
Other Cattle	2,775,000	49,00	135,975,000
Swine	10,389,000	21.80	226,480,200
Sheep	1,321,000	12.00	15,852,000
Total value of live stock			$ 640,787,200
Total value of farm products and live stock			$1,791,318,202

---

*For grain only; does not include approximately 40,000 acres used for pasture.

PART I

Synopsis of Proceedings of the Iowa State Board of Agriculture and Executive and Special Committee Meetings for the Year 1919.

SPECIAL COMMITTEE MEETING, SIOUX CITY.

January 2, 1919.

Meeting of Iowa State Fair, South Dakota State Fair and Interstate Live Stock Association with regard to speed matters, with the following representatives present: C. E. Cameron, J. P. Mullen, E. J. Curtin and A. R. Corey representing the Iowa State Fair; Joe Morton representing the Interstate Live Stock Fair of Sioux City, and Hugh Smith and C. N. McIlvaine representing the South Dakota State Fair.

T. H. Canfield, secretary of the Minnesota State Fair, was present and made application for the admission of the Minnesota State Fair to this circuit of fairs, and on motion of C. E. Cameron, seconded by E. J. Curtin, that the application of the Minnesota State Fair to become a member of this racing circuit be granted, and that the official title of said circuit be designated as "Iowa-Minnesota-South Dakota Fair Circuit;" said motion was unanimously carried.

The following conditions for harness racing were agreed upon: That each event is for the sum stated, plus the entrance fee received in each event. Early closing events close May 20th, 1 per cent entry fee to be paid at that time; second payment of 1 per cent July 1st and 1 per cent starting fee on or before 11:00 o'clock a. m. on the day of the race. Late closing events close as follows: Iowa State Fair, August 11th; Minnesota State Fair, August 18th; South Dakota State Fair and Interstate Live Stock Association, Sioux City, August 25th. Entry fee to late closing events, $10 to enter, which must accompany entry and $5 starting fee on or before 11:00 o'clock a. m. on the day of the race. Two or more horses from one stable or ownership may be named, but only one horse will be allowed to start. One per cent entry fee will be charged for each additional entry in the early closing events and $3.00 for each additional entry in the late closing events. All events 3 in 5, money divided 50-25-15-10 per cent. No deductions from money winners in any event. The nominator is liable only for the amount paid in. American Trotting Association rules to govern.

It was moved by Mr. Curtin, seconded by Mr. Smith, that the same plan of advertising for the circuit be conducted in the Horse Review and the Horseman as followed in 1918, namely, three issues immediately preceding the date of the closing of the early closing events, May 20th, and two weeks immediately preceding the dates of final entries in the late closing events for each respective fair.

The following resolution was unanimously adopted:

That we, the Iowa-Minnesota-South Dakota Fair Circuit deem it not advisable at this time to amalgamate the American Trotting Association and the National Trotting Association. While we deem it proper if eastern and western racing interests can eventually be equitably consolidated under one management that the harness racing interests would be handled from one parent body to advantage. We, however, feel that for the present no change should be made.

Further, that a copy of this resolution be furnished the Horse Review of Chicago and the Horseman of Indianapolis, Ind.

The following officers were elected for the ensuing year: Joe Morton, president, Sioux City, Iowa; C. N. McIlvaine, secretary, Huron, S. D.

There being no further business the meeting was adjourned.

The speed program was decided upon for the Iowa State Fair.

EXECUTIVE COMMITTEE MEETING.

January 7-8-9.

Members present, Cameron, Mullen and Corey.

The committee held a conference with Professor E. C. Bishop, superintendent of the school and junior departments. The committee approved the premium list for those departments, offering $1,570.00 in premiums, the same as appropriated in 1918.

The committee also discussed with Mr. Bishop the plan for selecting the boys to make up the Boys' State Fair Camp. The committee decided to pay the railroad fare, board and lodging for one boy from each county in the state. These boys are to be used as messengers and ushers in the grand stand and stock pavilion. The boys are to be selected through a competitive contest devised by the county agricultural agent or club leader.

The committee authorized the secretary to make a contract with Mr. H. P. Brown, manager Central Iowa Motors Company, granting him the privelege of storing automobiles, trucks and tractors in the stock pavilion. The rental to be $1.00 per month for each automobile, truck or tractor stored.

The committee approved the plan of using a part of the old check stand for building an ice house for the superintendent of grounds.

The $100,000.00 surety bond of W. W. Morrow, treasurer, filed with the department on December 14th, and the $10,000.00 surety bond of A. R. Corey, secretary, filed with the secretary of state on December 16th, were approved by the committee.

The committee employed Mr. James H. Deemer as superintendent of the Iowa State Fair Grounds for the ensuing year. His salary was fixed at $1,500.00 per year as authorized by the State Board of Agriculture at the annual meeting on December 13th. In addition to said compensation the superintendent is to have free house rent, use of farm barn and feed lot, down wood for fuel, free pasture for four cows, ten hogs and the privilege of keeping chickens; also gasoline and lubricating oil for automobile.

The committee approved the contract made by the secretary for the purchase of eleven acres of land lying north of the speed barns and race track for the sum of $9,000.00. Also the commission of $100.00 paid A. J. Ross for negotiating said contract and $15.00 attorney fee for J. L. Gillispie for drawing contracts and assignment.

The secretary submitted the following estimate on the cost of constructing two additional sections of the grand stand. The estimates were made by Architects Keffer & Jones:

ESTIMATE OF COST.

Additions to the Grandstand, Iowa State Fair, Des Moines, Iowa.

Excavating	$ 100.00
Footings	400.00
Reinforced concrete	1,200.00
Cement floors	175.00
Brick work	540.00
Sheathing	337.50
2x4 and 2x6	135.00
Roofing	600.00
Gal. iron cornice, etc	200.00
Painting	300.00
Steel in place	14,400.00
Carpenter labor	565.00
Mill work	80.00
Flag poles	75.00
	$19,107.50
Contractor's profit, 10%	1,910.75
Total for one section	$21,018.25
Total for two sections	42,036.50
Seating	4,500.00
Architect fees	1,300.00
	$47,836.50

The committee authorized the secretary to employ a stenographer for the publicity department.

The committee fixed the dates for the next board meeting for February 5th and 6th and President Cameron directed the secretary to issue the call.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING.

January 20-21.

Members present, Cameron and Corey.

The committee met with Mr. H. S. Stanberry, Waterloo, and J. Q. Lauer, Waverly, president and secretary, respectively, of the County and District Fair Managers' Association, and drafted a bill clearing up the statutes relative to county and district fairs and agricultural societies, and also proposing to increase the maximum state aid paid to county and district fairs from $800.00 to $1,500.00.

President Cameron announced the following standing committees of the State Board of Agriculture:

Executive

C. E. Cameron
J. P. Mullen
A. R. Corey

Auditing

F. E. Sheldon
E. M. Reeves
H. L. Pike

Resolutions

E. J. Curtin
H. O. Weaver
T. C. Legoe

Powers and Duties of Board

C. E. Cameron
J. P. Mullen
A. R. Corey
E. M. Reeves
C. F. Curtiss

Adulteration of Foods, Seeds and Other Products

R. A. Pearson
C. A. Tow
W. B. Barney

Noxious Weeds, Fungous Disease in Grains, Grasses, Etc.

E. M. Reeves
Chas. Escher, Jr.
E. T. Davis

Dairy and Dairy Products

W. B. Barney
C. F. Curtiss
Sears McHenry

Animal Husbandry

C. F. Curtiss
E. T. Davis
J. I. Gibson

Legislative

C. E. Cameron
J. P. Mullen
A. R. Corey
H. O. Weaver
E. J. Curtin

Revision of Premium List

C. E. Cameron
J. P. Mullen
A. R. Corey
T. C. Legoe
C. F. Curtiss
H. L. Pike

MEETING STATE BOARD OF AGRICULTURE.

February 5-6, 1919.

President Cameron called the meeting to order at 10:00 a. m. in the Agricultural Rooms at the State House and the following members responded to roll call:

Cameron, Mullen, Corey, Weaver, Davis, Reeves, Curtin, Tow, Sheldon, Escher, McHenry and Pike.

Mr. E. T. Davis and Mr. Sears McHenry took oath of office as members of the Iowa State Board of Agriculture before J. V. Arney, deputy clerk of the Supreme Court.

The secretary read the minutes, starting with joint program with county and district fair managers on December 10th and concluding with the executive committee meeting on January 20-21, 1919. There being no additions or corrections, the minutes were approved as read.

The board discussed at length the matter of dates for the 1919 Iowa State Fair.

Mr. Curtiss moved the dates for the 1919 fair be set for August 20-29, inclusive; that August 20-21 be designated as preparation days with a

25c admission and that the executive committee and superintendents of the live stock departments be instructed to arrange a suitable judging program and other attractive features for Friday and Saturday, August 22-23. Motion seconded by Mr. Weaver and carried.

The matter of providing a classification for amateur exhibitors for Shorthorn, Hereford, Angus, Holstein, Jersey and Guernsey breeds was discussed at length by the board. Mr. Weaver moved that the president appoint a committee to arrange a suitable classification. Motion seconded by Mr. Davis and carried.

Mr. Cameron appointed the following committee: Messrs. Pike, Davis and Curtiss.

The committee recommended the following classification for all six breeds:

Bull, 2 years, under 3	$15	$10	$5	$5	$5	$5
Bull, senior yearling	15	10	5	5	5	5
Bull, junior yearling	15	10	5	5	5	5
Bull, senior calf	15	10	5	5	5	5
Bull, junior calf	15	10	5	5	5	5
Heifer, 2 years, under 3	15	10	5	5	5	5
Heifer, senior yearling	15	10	5	5	5	5
Heifer, junior yearling	15	10	5	5	5	5
Heifer, senior calf	15	10	5	5	5	5
Heifer, junior calf	15	10	5	5	5	5

The board discussed at length the hour for releasing exhibits at the 1919 fair.

Mr. Mullen moved all live stock and other exhibits, including concessions, be released at 4:00 o'clock p. m. Friday, August 29th, and that express and transfer wagons be kept off the grounds until that hour. Motion seconded by Mr. Reeves and carried.

The board discussed the hour when premiums should be paid in the live stock department. Mr. Curtiss moved that the premiums in all live stock departments be paid at 2:00 o'clock p. m. Friday, August 29th. Motion seconded by Mr. Weaver and carried.

The board recessed until 1:30 p. m.

AFTERNOON SESSION.

The meeting was called to order at 2:00 p. m. with President Cameron in the chair and the following members responded to roll call: Cameron, Mullen, Corey, Morrow, Weaver, Davis, Reeves, Curtin, Tow, Curtiss, Sheldon, Escher, McHenry and Pike.

The president announced the board would proceed with the revision of the premium list and called upon Mr. Curtiss for his recommendations in the horse department.

Mr. Curtiss presented his recommendations, which called for a thorough revision of the horse department and the following increases in prize money:

Stable decorations	$ 25
Percheron class	65
Clydesdale class	86
Shire class	114
Belgian class	104

Also the following decreases:

Mule class	$ 60
Jack and jennet class	15

This made a net increase of $319.00 for the horse department. Mr. Davis moved that the recommendations of the superintendent of the horse department be approved by the board. Motion seconded by Mr. Weaver and carried.

The president called upon Mr. Tow, superintendent of the swine department, for his recommendations for that department.

Mr. Tow stated there would be no changes that he would recommend in the swine department, except the addition of $105.00 for the Poland China Senior Futurity and $48.00 in the Spotted Poland China division.

Mr. Reeves moved the recommendations of Mr. Tow be approved by the board. Seconded by Mr. Sheldon. Motion carried.

Mr. Reeves, superintendent of the horticultural department, was called upon next and made recommendations for the following increases in his department:

$35 in each of the four districts for best display of apples on plates.
$150 for display of fruits.
$53 for grapes.
$12.50 for native fruits, making a total increase of $407.50 in the department.

Mr. Curtin moved the recommendations of Mr. Reeves, superintendent of the horticultural department, be approved by the board.

Motion seconded by Mr. Escher and carried.

Mr. Davis, superintendent of the public safety department, explained to the board that while he had not worked out a plan for policing the fair grounds for the 1919 fair, he felt some change should be made that would reduce the expense considerable. Mr. McHenry moved Mr. Davis and the executive committee be authorized to work out a plan for policing the grounds and if possible use some method whereby the discharged soldiers might be used, permitting each member of the board to recommend ten or twelve reliable men from his district. Motion seconded by Mr. Weaver and carried.

Mr. McHenry, superintendent of the ticket auditing department, indicated there were no recommendations or changes in his department that were necessary at this time.

AGRICULTURAL AND CULINARY DEPARTMENT.

Mr. Weaver, superintendent of the agricultural and culinary departments, recommended that all outside wall space in the Agricultural Building be set aside for county exhibits. He suggested that the county agents, through Mr. Coverdale, the state leader, be invited to provide not less than 32 exhibits. Mr. Weaver also recommended that the board offer as premiums for county exhibits, $150.00 for each exhibit scoring above 500 points and a sweepstakes prize of $110.00 for the highest scoring county exhibit; also $100.00 for best decorated and best arranged county exhibit. Mr. Weaver further recommended that for the individual farm exhibits

$125.00 be added for each exhibit that scores over 500 points and that $100.00 be offered as sweepstakes for the highest scoring individual farm exhibit. Mr. Weaver also presented a revision of the classification recommended by the exhibitors, calling for the following increases:

Sweet and pop corn classes	$12
Sheaf grass and forage	58
Sheaf grain	65
Potatoes	73
Table vegetables	18

Mr. Weaver further recommended that in both the county and individual farm exhibits the state be divided into four districts and the exhibitors from these districts be required to compete against each other the same as they do for field corn.

Mr. Escher moved the recommendations of Mr. Weaver be approved. Seconded by Mr. Pike. Motion carried.

Mr. Weaver moved that in the culinary department $39.00 be added to the bread classification and that the wartime classification for bread, cakes, cookies, etc., amounting to $142.00, dried vegetables for $12.00 and dried fruit for $12.50 be eliminated this year.

Mr. Escher moved the recommendations made by Mr. Weaver be approved. Seconded by Mr. Reeves and carried.

Mr. Corey suggested that where necessary canned goods be opened for judging and that arrangements be made with the domestic science department at Ames to have them reprocessed and resealed immediately after judging so there would be no loss sustained by the exhibitor. Mr. Weaver moved the secretary work out a plan for carrying out this idea. Seconded by Mr. Curtiss and motion prevailed.

Mr. Sheldon, superintendent of the admissions department, asked that the executive committee provide two exits at the Grand avenue entrance, one on the north side and one on the south side of the vehicle entrance.

Mr. Weaver moved the executive committee be directed to carry out this recommendation. Seconded by Mr. Pike and motion carried.

Mr. Escher, superintendent of the sheep department, recommended that inasmuch as the parties who have been providing premiums for the wool exhibit and sheep shearing contest did not care to continue the offer, the board offer $100.00 for these two classes and that an additional premium of $30.00 be offered for trimming and blocking sheep for the show ring.

Mr. Escher also recommended that the classification for goats be revised by eliminating all bucks over six months of age and adding $100.00 for flock or premier exhibitor in the goat classes.

Mr. Curtin moved the recommendations of Mr. Escher be approved. Seconded by Mr. Sheldon and carried.

Mr. Pike, superintendent of the cattle department, made the following recommendations:

That inasmuch as the Shorthorn Association offered dollar for dollar this year in the breeding and fat cattle classes, the board should offer $2,600 for Shorthorns in open competition, $400 for Iowa Shorthorns and $250 for fat Shorthorns. This would call for an increase of $100 on Shorthorns.

Mr. Pike also indicated there would be no other increases in the cattle department, except the $3,000 offered for the six amateur classes.

Mr. Escher moved the recommendations of Mr. Pike be approved by the board. Seconded by Mr. McHenry and carried.

Mr. Morrow, treasurer, stated he had no recommendations to make for his department, but that he would like to second the recommendation made by Mr. Sheldon calling for exits on the north and south side of the vehicle entrance at Grand avenue.

Mr. Mullen, superintendent of the machinery department, stated he had no recommendations at this time but would like to have the executive committee take the necessary steps to prohibit parking automobiles on the north and east side of machinery hall.

Mr. Corey recommended that the rules of the boys' judging contest be revised so as to permit girls to compete; also that they be required to judge two rings of sheep and that the five regular scholarships in the agricultural and home economics departments, valued at $200, $175, $150, $125, $100, be awarded as prizes and that two $25 prizes be awarded to pay expenses of the winning boys or girls to the short course at Ames.

Mr. Curtiss moved these recommendations be approved. Seconded by Mr. Weaver and carried.

Mr. Corey suggested that the premium ribbons in the boys' and girls' baby beef contest indicate the place won from first to twelfth place and from thirteenth to fiftieth place the ribbons be marked "Honorable Mention," instead of indicating the standing in the contest.

LEGISLATIVE MATTERS.

The board discussed the advisability of having a bill introduced in the legislature, calling for certain amendments to the law governing the department of agriculture and the weather and crop service bureau.

The board decided the following changes should be asked for: Increase the appropriation for the support of the weather and crop service bureau from $2,700 to $3,700 annually; increase the compensation of the director from $1,500 to $1,800 annually; amend section 1657-n so that the salary of the secretary of the state board of agriculture might be fixed by the board and paid out of fair receipts; amend section 1657-o increasing the salary of the treasurer from $100 to $250 per annum, and expenses; amend section 1657-p changing compensation of the members of the board from $4.00 per day and mileage of five cents per mile each way to $10.00 per day and actual traveling, hotel and other expenses; amend section 1657-r, changing date for publishing the premium list from April first to May first; amend section 1657-t increasing appropriation for insurance, improvements and repairs from $1,000 to $15,000 annually.

On motion of Mr. Curtin, the board adjourned to meet at 10:00 a. m. Thursday, February 6th.

THURSDAY, FEBRUARY 6TH.

The board met at 10:00 a. m. with all members present. The board adjourned to the fair grounds for the purpose of looking over the location for proposed cattle barn and to pay respects to the breeders in attendance at the national Polled Hereford meeting and sale in progress at the state fair grounds.

AFTERNOON.

The board convened at 2:00 p. m. with President Cameron in the chair. The following members responded to roll call: Cameron, Corey, Mullen, Morrow, Weaver, Davis, Reeves, Curtin, Tow, Curtiss, Sheldon, Escher, McHenry and Pike.

Major Frank E. Lyman, a Spanish-American war veteran, appeared before the board and requested that some concession be made to the Spanish-American war veterans in the way of free admissions. He stated that there had been no complaint but that they would like to be given the same consideration that was given the Civil War veterans a few years ago.

This matter, and the matter of admitting soldiers of the present war was given careful consideration by the board and Mr. Weaver moved that Saturday, August 23d, be designated as Soldiers' Day and that all soldiers of the Spanish-American and World's War be admitted free on that day and that the executive committee arrange for military bands and other military features that would make the day attractive to all soldiers.

Motion was seconded by Mr. McHenry and carried.

Mr. Legoe, superintendent of the Exposition Building, presented recommendations for textile and china department.

Mr. Legoe recommended that rule 5 under the head of that department be amended to read as follows: "exhibitors may receive articles placed on exhibition after 6:00 p. m., Friday, August 29th;" also that class 181, "Miscellaneous," be discontinued and that an item for "Other Than Named" be inserted at the end of each class in the textile department.

Mr. Legoe also stated on account of the dust and condition of the floor in the Exposition Building it was difficult for him to secure attractive mercantile exhibits and he would, therefore, recommend that a cement floor be placed in the Exposition Building this year and that the booths be rebuilt and the sides of the dome and roof be repaired.

Mr. Curtiss moved the board approve the recommendations for changes in the rules and classifications of Mr. Legoe's department and that the matter of replacing the floor and repairs to building be left to the executive committee and superintendent of the Exposition Building with power to act.

Mr. Curtin seconded the motion. Motion carried.

Mr. Curtin, superintendent of the speed department, presented the speed program for the 1919 fair as agreed upon by the executive committee and Superintendent Curtin at the special committee meeting at Sioux

City, January 2d. Mr. Curtin recommended that an additional class for 2:13 trotters with a purse of $600 be added to the program as outlined.

Mr. Davis moved that the recommendation of the superintendent of the speed department be approved. Motion seconded by Mr. Curtiss and carried.

Mr. Curtin further recommended that the water mains be extended from the city water mains on Thirtieth street into the fair grounds and that a water main be extended along the front of all the speed barns.

Mr. Curtiss moved the executive committee be instructed to have the water mains extended as outlined by Mr. Curtin. Seconded by Mr. McHenry. Motion carried.

The board discussed the advisability of asking permission of the legislature to lease coal rights under the state fair grounds. The board was of the opinion that inasmuch as all of the coal on the north of the fair grounds had been removed and that the mine in operation about 300 feet east of the fair grounds would soon be abandoned unless the fair grounds lease was secured, that it would be advisable to recommend to the legislature that this authority be given.

Mr. Legoe moved the executive committee be authorized and empowered to draft a bill covering this matter and have it introduced. Motion seconded by Mr. Weaver and carried.

Mr. Corey presented the following advertising budget for the 1919 fair:

ADVERTISING BUDGET.

	Cost 1918	Budget for 1919
Country weekly papers	$ 4,076.77	$ 4,250.00
Plate matter for country papers	841.94	1,000.00
Daily papers outside Des Moines	458.50	600.00
Des Moines daily papers	4,078.44	4,500.00
Agricultural, live stock and breed papers	1,564.20	1,750.00
Horse papers, advertising speed program	661.74	600.00
Miscellaneous papers and magazines	197.91	200.00
Implement and machinery papers	140.00	150.00
Supt. advertising, salary 5 months	800.00	833.00
Stenographer and clerk, salary 5 months	370.00	400.00
Printing Greater Iowa	807.89	1,000.00
Postage on Greater Iowa	38.04	50.00
Drayage on Greater Iowa	11.00	25.00
Hangers and window cards	882.00	750.00
Billboard paper and dates	135.55	150.00
Billboard service	1,017.04	1,000.00
Distributing advertising matter	74.10	75.00
Cuts and electros	119.99	150.00
Miscellaneous items	164.50	517.00
	$16,439.61	$18,000.00

Mr. Davis moved the advertising budget calling for $18,000 as outlined by the secretary be approved. Seconded by Mr. Sheldon. Motion prevailed.

The secretary advised the board that no effort had ever been made to carry out the planting plan furnished by Mr. Simond, landscape architect. Mr. Corey suggested something should be done along the landscape line and recommended a landscape architect be employed, or some one experienced in planting should be employed to have general supervision over the planting and caring for flowers, shrubs, trees, etc.

Mr. Reeves moved the matter of carrying out the planting plans be delegated to the executive committee with instructions to employ the necessary help to carry out the plan as outlined by Mr. Simond. Motion seconded by Dean Curtiss and carried.

Mr. Reeves offered the following resolution with regard to the European corn borer and moved its adoption:

> Whereas, The European corn borer (Pyrausta nubilalis) has gained a foothold in Massachusetts where it has proven to be very destructive to the corn and other crops and in fact the most dangerous insect ever introduced into this country, as it not only attacks and destroys corn, our most valuable crop, but thrives on the small grains, nearly all garden vegetables and even the weeds of the fields and roadsides, and
>
> Whereas, It has been estimated that the cost of eradicating this insect will be $500,000 or about ten dollars for each acre now infested; therefore, be it
>
> Resolved, That the Iowa State Board of Agriculture ask the Congress of the United States to appropriate $500,000 for the eradication of the European corn borer and that we urge the Iowa Legislature now in session, and all organizations of the state interested in the continued prosperity of the country to pass similar resolutions and inform their members in Congress of their action.

Motion was seconded by Mr. Mullen and carried.

The board discussed at length the appropriation bills to be presented to the legislature.

The secretary presented the following estimate on the cost of proposed cattle barn:

CATTLE BARN.

Excavating	$ 635.00
Drain tile	375.00
Concrete footing	825.00
Cement floors	614.40
Brick	20,100.00
Roofing	15,250.00
Sheathing	10,875.00
Rafters	4,560.00
Sheet metal	1,469.40
Mill work	10,445.00
Steel	40,000.00
Painting	1,850.00
Hardware	675.00
Plumbing	5,250.00
Heating	8,856.25
Stalls	5,559.25
	$127,359.30
Contractor's profit, 10%	12,735.93
	$140,095.23

SALE RING.

Excavating	$ 154.50
Drain tile	45.00
Concrete footing	132.00
Cement flooring and seats	2,800.00
Brick	2,450.00
Roofing	1,830.00
Sheathing	1,305.00
Rafters	550.00

Sheet metal	176.50
Mill work	1,258.00
Steel	5,800.00
Painting	222.00
Hardware	85.00
Plumbing	550.00
Total	$ 17,358.00
Contractor's profit, 10%	1,735.80
Total cost	$ 19,093.80
Architect's fee, 3%	4,775.67
Total cost	$163,964.70

The board came to the conclusion that inasmuch as East University is to be improved and made one of the main thoroughfares through the city, the board should ask for a sufficient appropriation to buy acreage lots 1, 2, 3 and 4, known as the Sims Estate, and containing approximately 41 acres.

The secretary also presented an estimate on the cost of curbing and paving East Thirtieth street from the north side of Grand avenue to the south side of East University avenue, showing the cost would be approximately $9,000.00.

Mr. Pike moved the executive committee be instructed to formulate bills asking for an appropriation of $150,000.00 for the purpose of constructing a cattle barn and sale pavilion; $54,000.00 for the purpose of buying 41 acres of additional land and $9,000.00 for paying the paving and curbing assessment against the state fair grounds. Seconded by Mr. Escher. Motion carried.

The secretary called the attention of the board to an estimate on the cost of constructing two additional sections of the grand stand.

Mr. Curtiss made the following motion: "That it is the sense of the board that the surplus funds on hand should be used for erection of two additional sections to the grand stand at such time as the board can let a favorable contract." Seconded by Mr. Weaver. Motion carried.

President Cameron appointed Messrs. Pike, Davis and Legoe committee on per diem and mileage.

Mr. Reeves moved the board appropriate $200.00 for the Boys' Judging Team Contest, with the understanding that the state club leader raise an equal amount for the contest. Seconded by Mr. Legoe. Motion carried.

The committee on per diem and mileage made the following report:

Mr. President: Your committee on per diem and mileage beg to report as follows:

Name	Days	Rate	Amount	Miles	Amount	Total
15762 C. E. Cameron	5	$4.00	$20.00	140	$14.00	$34.00
15763 J. P. Mullen	5	4.00	20.00	117	11.70	31.70
15764 H. O. Weaver	4	4.00	16.00	169	16.90	32.90
15765 E. T. Davis	4	4.00	16.00	121	12.10	28.10
15766 Elmer Reeves	4	4.00	16.00	126	12.60	28.60
15767 E. J. Curtin	4	4.00	16.00	195	19.50	35.50
15768 C. A. Tow	4	4.00	16.00	112	11.20	27.20
15769 T. C. Legoe	3	4.00	12.00	85	8.50	20.50
15770 Chas. F. Curtiss	4	4.00	16.00	37	3.70	19.70
15771 F. E. Sheldon	4	4.00	16.00	123	12.30	28.30

15772	Chas. Escher, Jr.	4	4.00	16.00	100	10.00	26.00
15773	Sears McHenry	4	4.00	16.00	129	12.90	28.90
15774	H. L. Pike	4	4.00	16.00	206	20.60	36.60
							$378.00

Respectfully submitted,

H. L. PIKE,
E. T. DAVIS,
T. C. LEGOE.

Mr. Mullen moved the report of the committee on per diem and mileage be adopted and the secretary instructed to draw warrants for the respective amounts. Seconded by Mr. Escher. Motion carried.

Mr. Curtiss moved that in accordance with the statutes the management of the 1919 fair be delegated to the executive committee and the elective members of the board.

Seconded by Mr. Davis. Motion carried.

Mr. Reeves moved all unfinished business be referred to the executive committee with power to act. Seconded by Mr. Sheldon. Motion carried.

Mr. Weaver moved that the board adjourn to meet at the call of the president. Seconded by Mr. Escher. Motion carried.

IN VACATION.

The following bids were received by the secretary for publishing 12,000 copies of the 1919 premium list on a basis of 256 pages:

Homestead Printing Company	$1,376.00
Campbell-Johnson Printing Company	2,075.00
Heilicker Printing Company	1,585.60

Contract was awarded to the Homestead Printing Company on their bid of $1,376.00.

SPECIAL COMMITTEE MEETING—AUDITORIUM HOTEL, CHICAGO.

February 16-21.

Members present, Cameron, Mullen, Corey and Director Curtin.

The committee attended the following special meetings: International Motor Contest Association, February 17th; American Trotting Association and Great Western Racing Circuit, February 18th; International Association of Fairs, February 19th to 21st, inclusive.

The latter meeting was for the purpose of perfecting the organization of the International Association of Fairs and also for receiving propositions for amusement features for the various fairs, such as midway shows, night show, auto races, aviation, bands and free attractions.

The committee entered into the following contracts during the meeting:

The Thearle-Duffield Fireworks Company for night show in front of the grand stand, entitled "Battle of Chateau Thierry." The show to take place six nights, Friday, August 22d, to Thursday, August 28th, inclusive, and the consideration of the contract $9,000.00.

The committee, in co-operation with the management of the Minnesota State Fair and the Wisconsin State Fair, employed Thaviu's Band, consisting of 48 people, including A. E. Thaviu, director, three singers and a ballet of 12 for eight days for the sum of $3,950.00.

The committee also entered into contract with R. A. Hankinson to furnish seven racing cars and drivers to participate in the auto races on Friday, August 22d, and Friday, August 29th, and to furnish Hankinson's original auto polo for the period of the fair for the sum of $3,500.

The committee also entered into contract with Walter W. Raub, Salem, Ohio, to furnish one balloon ascension each day with parachute drop, using from three to twelve parachutes for the sum of $400.00.

The committee also entered into contract for the C. A. Wortham Shows, Mr. Wortham agreeing to furnish not less than 12 shows and four riding devices for the full period of the fair on a percentage basis, the fair to receive 30 per cent of the gross receipts from all shows and rides.

The committee also agreed upon a contract with J. Alex Sloan to furnish six racing cars and six professional drivers to participate in automobile races on Friday, August 22d, and Friday, August 29th, for the sum of $3,000.00.

The committee entered into contract with F. M. Barnes, Inc., Chicago, Ill., to furnish nine hippodrome acts for $5,875.00.

EXECUTIVE COMMITTEE MEETING.

February 25.

Members present, Cameron, Mullen and Corey.

The proposition from the state club leader for the state board of agriculture to contribute $100.00 for the Pig Club Exhibit at the state fair, with the understanding that the state club leader secure conributions in the sum of $250.00, was brought to the attention of the committee. The committee authorized the contribution providing the state club leader secure contributions amounting to $250.00 additional for the classification.

Mr. Mullen was directed to attend the National Tractor Show at Kansas City, February 26th and 27th, for the purpose of soliciting exhibits of tractors for the Iowa State Fair.

The committee met with Senators Arney, Holdoegel and White relative to Senate Files 192 and 193 asking for appropriations for a new cattle barn, additional land and funds for paying paving assessment against the state fair grounds.

February 26.

The committee visited the fair grounds with the sub-committee from the house (Knickerbocker, Walrath and Moen) for the purpose of viewing the additional land asked for and to look over the present cattle barns.

The committee authorized payment of bills.

EXECUTIVE COMMITTEE MEETING.

March 7-8.

Members present, Cameron, Mullen and Corey.

Members of the senate sub-committee on senate files 192 and 193 were taken to the fair grounds where they investigated the need of additional land and new cattle barn.

The executive committee appeared before the agricultural committee in the senate to explain senate files 192 and 193.

The committee approved the employment of C. C. Heer as assistant secretary at $150.00 per month and Laura Schulze as stenographer for the publicity department at $100 per month.

The committee authorized payment of bills.

EXECUTIVE COMMITTEE MEETING.

March 11-12.

The committee met with the following members present: Cameron, Mullen and Corey; also Directors Weaver and Curtiss.

The committee met with the sub-committees from the house and senate relative to appropriation bills for cattle barn and additional land. The members of these sub-committees were taken to the state fair grounds for the purpose of viewing the land the state proposes to purchase and to determine the condition of the present cattle barns. The executive committee also appeared before the appropriation committee in the house and explained these two bills. Messrs. John Wallace, of Wallaces' Farmer, and B. O. Gammon, secretary American Polled Hereford Association, also appeared before the appropriation committee in the house in the interest of these bills.

The committee held a conference with Mr. L. E. Fogelsong and discussed the matter of beautifying the state fair grounds. The secretary was instructed to enter into contract along the lines brought out in conference covering supervision of the planting and care of trees, shrubs and flowers on the state fair grounds for the sum of $500 per year.

Dean Curtiss recommended that the $1,000 saddle horse stake be offered at the Iowa State Fair in 1919 under the same condition as the stake offered at the 1914 fair. The recommendation was approved by the committee.

The hour when live stock must be in place at the 1919 Iowa State Fair was discussed at length by the committee, Dean Curtiss and Mr. Weaver. On account of the conflict with the Illinois State Fair and the agreement with the Live Stock Record Association that live stock will be accepted by the Iowa State Fair until 9:00 a. m. Monday morning, August 25th, the committee adopted the following rule, which in general will apply in the horse, cattle, swine and sheep departments:

> Judging in the Horse Department will begin on the following hours and dates: Ponies and mules at nine a. m. Saturday, August 23d; draft and harness classes, all breeds, at nine a. m. Monday, August 25th. No deviation will be made from this judging program.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING.

March 18-21.

The committee met with members Cameron, Mullen and Corey and Director Pike present.

The committee met with members of the Des Moines Automobile Dealers' Association, Dean Schooler, president, and C. G. Van Vliet, secretary-treasurer. The meeting was for the purpose of discussing plans and location for the auto show to be held in connection with the state fair. Messrs. Van Vliet and Schooler stated if the board found it possible to set aside Machinery Hall for the auto, truck and tractor exhibit they would agree to occupy all the space with a creditable exhibit and to decorate the building in a tasty manner. They stated they would pay ten cents per square foot for the space.

The matter of rates for floor space in the auto show room, Machinery Hall, and Power Hall were discussed by the executive committee. The committee agreed on the following rates: Auto show room and Machinery Hall, ten cents per square foot; Power Hall, five cents per square foot.

The committee conferred with Mr. Knickerbocker and other members of the appropriation committee relative to the bill for cattle barn and additional land. It was agreed Mr. Knickerbocker should request these bills be made a special order for Thursday afternoon, March 27th.

The secretary was instructed to communicate with F. M. Barnes, Chicago, and request that he meet with the executive committee on Friday forenoon, March 28th, to discuss propositions for aviation features at the fair.

The secretary was also requested to notify parties owning the land north of the fair grounds to meet the executive committee Friday afternoon, March 27th, for the purpose of determining the prices asked for acreage and resident properties.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING.

March 26-27-28.

The committee met with Messrs. Cameron, Mullen, Corey and Director Pike present.

The secretary presented a revision of the floricultural department as submitted by Superintendent Wesley Greene, calling for an increase of $285. The committee approved the classification as recommended.

The secretary brought to the attention of the committee the matter of increasing admissions to the bleachers for afternoon and evening performances from 25 cents to 35 or 50 cents. After discussing the matter the committee decided this was a matter to be decided by the board and action was, therefore, deferred.

The committee held a conference with Mr. F. M. Barnes, Chicago, relative to an aviation feature for the state fair.

The committee expressed a desire for an attraction consisting of two or three planes capable of putting on aerial battles and making night flights. Mr. Barnes expressed himself to the effect that there were a great many aviators in the country but not many of them were equipped with machines for doing exhibition work. For that reason he doubted whether an attraction as outlined by the committee, could be secured.

The committee took an option with F. M. Barnes, Inc., for the services of Aviator Louis Gertson to do day and night flying, August 22-28th, inclusive, for the sum of $2,500.

The committee held a conference with the following parties, owners of acreage and residence property lying north of the state fair grounds, for the purpose of determining the value they placed upon their property, which property the state board of agriculture desires to secure with funds made available by senate file 193:

Matilda Winterrowd, owner of lot No. 2, containing approximately nine and one-half acres and one residence; Lucinda Short, representing Stella M. Henderson, owner of lot No. 3, containing nine acres; Geo. Sims and Phoebe D. Sims, owners of lot No. 4, containing ten acres and miscellaneous improvements; C. D. Nichols, owner of residence at 3209 East University avenue; Clayton Norgar, owner of residence at 3211 East University avenue; Ceasar Manfredo, owner of residence at 3225 East University avenue.

The secretary presented to the committee and also to these parties the following estimate of the value of this property as appraised by Mr. L. A. Jester and A. B. Elliott:

Mr. A. R. Corey, Secretary,
Iowa State Board of Agriculture,
Des Moines, Iowa.

Dear Sir:—

As per your request we have made a careful inspection of the property lying north of the state fair grounds, known as The Sims Estate, and submit herewith our estimate of its value.

Acreage, Lot No. 2, containing nine and one-half acres, improved with a one-and-one-half-story dwelling 26x26 feet, containing five rooms, bath and sun room 9x17 feet. Full basement. Estimated value of house, $2,500. Land, $800 per acre. Total value of $10,000.

Acreage, Lot No. 3, containing nine acres, no improvements. Estimated value, $800 per acre. Total value, $7,200.

Acreage, Lot No. 4, containing ten acres and the following improvements: One-story dwelling house 30x40 feet, about 25 years old; three-room summer cottage 16x22 feet, with wing 8x12 feet; three-room summer cottage 12x24 feet, with wing 12x12 feet; small barn 10x12 feet, with sheds on two sides 10x12 feet; two small sheds, one 10x12 feet and one 8x12 feet; brick chicken coop 22x28 feet; large outside vegetable cellar; also an orchard containing one-half acre blackberries; three acres in one-year-old cherry trees (about 175 trees) and one acre in old orchard consisting of apple, cherry and plum trees not in good bearing condition. Estimated value, including all improvements, $1,000 per acre. Total value, $10,000.

Residence property, 3209 East University Avenue. One-and-one-half-story house 22x24 feet, containing five rooms. Lot 50x137½ feet. Estimated value, $2,500.

Residence property, 3211 East University Avenue. One-and-one-half-story house 22x24 feet, containing five rooms. Lot 100x137½ feet. Estimated value, $2,750.

Residence property, 3223 East University Avenue. One-story house 24x36 feet, containing five rooms. Garage 10x14 feet. Lot 50x437 feet. Estimated value, $2,750.

Residence property, 3225 East University Avenue. One-story house 24x38 feet, containing seven rooms. This is an old house and in very poor condition. Lot 50x137½ feet. Estimated value, $2,000.

Respectfully submitted,

L. A. JESTER,
A. B. ELLIOTT.

The conference resulted as follows:

Matilda Winterrowd stated she valued lot No. 2 containing approximately nine and one-half acres and one dwelling house at $18,000.

Mrs. Lucinda Short stated the price asked by Stella M. Henderson for acreage lot No. 3 containing nine acres, was $1,500 per acre, or a total of $13,500.

Geo. Sims and Phoebe D. Sims stated they valued acreage lot No. 4, containing ten acres and miscellaneous improvements, at $18,000.

C. D. Nichols, owner of residence property at 3209 East University avenue, stated he paid $2,500 for the property a few years ago and since that time had improved it by extending the city water into the house and by purchasing necessary equipment for bathroom. He stated the property was bought on contract and there was still due on this contract the sum of $1,375. He stated he would take $2,800 for this property or a sum necessary to purchase a suitable lot in the same neighborhood and to move his house on to the lot and put it in as good condition as it is at present.

Clayton Norgar, owner of property at 3211 East University avenue, stated he bought his property on contract and that there was still $2,000 to be paid. He stated he had paid curbing assessment of $47.25 and made other minor improvements to the property. He said he would take $3,000 for this property.

Ceasar Manfredo, owner of residence property at 3225 East University avenue, stated he paid $1,800 for this property a few years ago and had been to the following expense for improvements; extending city water into house, $90; fencing lot, $100; orchard, consisting of fruit trees, grape vines and berry bushes, $50; painting house inside and out, $110. He told the committee his price for the property was $3,000.

The committee also secured the following information relative to the residence property owned by J. E. Aulman, 3223 East University avenue. Mr. Aulman bought this property a short time ago for $2,200. Since that time city water has been extended into the house and a garage built upon the back part of the lot. At the time the committee appraised this property he indicated his price was $3,200.

The committee considered the value placed upon the acreage and residence properties by the owners as unreasonable, with the exception of house and lot owned by C. D. Nichols.

The committee directed the secretary to request the attorney general of the state of Iowa to proceed to condemn all of this property with the exception of the house and lot owned by Mr. C. D. Nichols.

EXECUTIVE COMMITTEE MEETING.

April 9-10-11.

The committee met with Messrs. Cameron, Mullen and Corey present.

The committee visited the fair grounds with Mr. Fogelsong and discussed improvements to be made at the Grand avenue and Walnut street entrances; also the planting to be done on the grounds this season.

The committee instructed the secretary to have Keffer & Jones prepare sketches for covers over turnstiles and exits at Grand Avenue, the plan to provide for four entrances, turnstiles and one exit on the south side and one exit and one six-foot gate to be used as an exit on the north side of Grand Avenue.

The committee also approved the plan for extending the cement walk on the north and south sides of Grand avenue to the pavement on East Thirtieth street; also the walk on the north and south sides of Walnut street entrance to the pavement in place on Thirtieth street.

The secretary was instructed to prepare plans and specifications and advertise for bids on the cement walk, cement floor in the Exposition Building and approximately 1,000 feet of four-foot storm sewer.

The superintendent of grounds was directed to proceed with the building of 32 county booths in the Agricultural Building; also 28 booths for individual farm exhibits.

Mr. Fogelsong was instructed to proceed with the planting of shrubs and street trees and beautify the entrances at Grand avenue and Walnut streets as per plans submitted.

The committee approved the contract submitted by Mr. Herbert Kline for the "Garden of Rides."

The committee had a conference with Mr. C. D. Nichols and purchased his property at 3209 East University avenue for the sum of $2,800.00. The secretary was also instructed to negotiate with Mr. Norgar, Mr. Aulman and Mr. Manfredo and to purchase their property if the same could be secured at a figure consistent with the appraisement made by the committee.

The committee met with Mr. Sloss of the Des Moines City Railway to ascertain if it would be possible to bring three carloads of government exhibits in over the Thirtieth street line and switch them to the sidetracks along the south side of Power Hall. They also discussed with Mr. Sloss the possibility of building a sidetrack and an unloading platform inside the fair grounds along East University avenue.

The secretary presented a proposition for the Mahaffa Orchestra, consisting of twelve girls and boys between fourteen and seventeen years of age, the orchestra to play four hours a day for seven days for the sum of $225.00.

The committee accepted the proposition and instructed the secretary to make the contract.

The committee also met Dean Schooler and C. C. Van Vliet, president and secretary of the Des Moines Automobile Dealers' Association, at the fair grounds and made arrangements to locate the automobile, truck and accessory show in the north three-fifths of Machinery Hall. The rate to be ten cents per square foot and the Automobile Dealers' Association to have the right to do their own decorating, put in a band stand and provide their own orchestra or band.

The committee approved the payment of bills.

EXECUTIVE COMMITTEE MEETING.

April 18-19.

Members present, Mullen, Cameron and Corey.

The committee met for the purpose of conferring with parties who own the houses and lots on the tract of land the board desires to purchase. The committee held a conference with these parties and directed the secretary to purchase the property owned by Clayton Norgar, 3211 East University avenue, for the sum of $2,875.00, all taxes and special assessment for curbing to be paid by Mr. Norgar.

The secretary was also directed to purchase the property owned by Ceasar Manfredo at 3225 East University for the sum of $2,500.00, Mr. Manfredo to pay all taxes and specials for curbing.

The committee also instructed the secretary to purchase the property owned by J. E. Aulman, 3223 East University avenue, for the sum of $2,900.00, Mr. Aulman to pay all taxes and specials for curbing.

The committee authorized the secretary to attend the meeting of the Middle West Fairs on Sunday, April 29th, at Kansas City, Mo., and also meet the committee of the International Association of Fairs and Expositions on government exhibits in Chicago on April 21st.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING.

May 8-9-10.

Members present, Cameron, Mullen and Corey.

The Independent Order Odd Fellows was granted the use of the Stock Pavilion and picnic grounds east of the Stock Pavilion for July 10th for the purpose of installing officers of all the lodges in Polk county, with the understanding that they would pay the expense incurred in cleaning up the grounds, turning on lights, etc.

Upon recommendation of the American Shorthorn Record Association the Milking Shorthorn Association and Mr. Pike, superintendent of the cattle department, the committee appropriated $300 for a classification for Milking Shorthorns, with the understanding that the American Shorthorn Record Association would contribute an equal amount.

The committee authorized the secretary to enter into contract for Henry and His Band, said band to consist of 34 pieces, for the period of seven days, for the sum of $1,452; also with J. Henri Fischer for Fischer's Burlington Band, said band to consist of 25 pieces, for a period of seven days for the sum of $1,350.

The committee received the following bids for constructing approximately 1,000 lineal feet of four-inch storm sewer; 6,000 square feet of four-inch sidewalk; 20,000 square feet three-inch cement floor in the Exposition Building.

BIDS FLOOR, WALKS AND SEWER.

	Floor	Walks	Sewer
Arthur H. Neumann Company	$ .0915	$ .13½	$7.56
Jas. E. Howard	.14⅝	.19 2-5	4.51½
E. A. Bates	.12¾	.15¾	
John Potts	.10 8-10	.12¾	4.40
Thos. Carey & Sons	.11½	.14	4.49
Alexander & Higbie			4.21
J. L. Hansman & Sons	.14 8-10	.16½	6.80

The contract for the flooring in the Exposition Building was awarded to the Arthur H. Neumann Company at .0915c per square foot; the contract for the cement walks was let to Potts Brothers at 12¾c per square foot, and the contract for storm sewer to Alexander & Higbie at $4.21 per lineal foot.

The superintendent of grounds was directed to paint the roof of the Agricultural Building, roof of the Administration Building, roof of cattle barn No. 3, the large sign on the ridge of the street car entrance and stools and partitions in all the range toilets.

The superintendent was directed to lay a ten-inch drain tile from the intake at the Walnut street entrance and extend it inside the grounds with branches to the low ground north of Power Hall and another branch to extend to Grand avenue along the west side of Machinery avenue.

The superintendent of grounds was directed to widen the street along the north side of Power Hall.

The committee assigned the east half of the room under the grand stand, approximately 8,000 square feet, for the government exhibit and the secretary was authorized to deposit with the United States disbursing officer the sum of $1,500 as a guarantee for taking care of the expense of putting on the government exhibit, providing congress fails to make the necessary appropriation.

The committee approved plans for entrance and exit at Grand avenue and also the exit at Walnut street and directed the architect to prepare plans and ask for bids on same.

SPECIAL COMMITTEE MEETING.

May 17, 1919.

Mr. Sheldon, superintendent of the admissions department, and Mr. McBeath, his assistant, were called for a conference to determine the advisability of using identification checks for automobiles at the 1919 fair. The matter was thoroughly discussed and the committee came to the conclusion that it would be impracticable to handle the automobiles in this manner. It would be necessary to almost double the admission force and the delay in getting the automobiles out of the grounds would prove very disagreeable to the patrons. The committee decided to drop the matter.

The committee also went over the ticket order and made a number of suggestions for changes in the tickets this year.

EXECUTIVE COMMITTEE MEETING.

Thursday, May 22.

Members present, Cameron and Corey.

As per the advertised notice, four dwelling houses were offered at public auction at 10:00 o'clock a. m., Thursday, May 22d. S. K. Noland, auctioneer.

The houses sold as follows:

Five-room bungalow at 3223 East University avenue, purchased by Caleb John for $1,000.

Five-room cottage at 3209 East University avenue, sold to Harry F. Noe, 820 Fifteenth street, for $820.

Five-room cottage at 3219 East University avenue, sold to I. Corn, 521 Mulberry street, for $660.

Seven-room cottage at 3225 East University avenue, sold to I. Corn for $555.

Garage back of house at 3223 East University avenue, sold to G. R. Stookey, Thirty-third and Easton boulevard, for $30.

Garage back of house at 3211 East University avenue, sold to E. C. Morris for $27.50.

Chicken coop back of house at 3223 East University avenue, sold to Henry Deets, Thirty-third and Easton boulevard, for $6.

Chicken coop back of house at 3209 East University avenue, sold to Chas. D. Nichols for $5.

The committee instructed the superintendent of grounds to use the three-inch pipe now on hand in laying a water main connecting with the water mains now in place on Capitol avenue, extending it along the east side of the street in front of the speed barns.

The committee directed the superintendent of grounds to employ George Whitney and teams for graveling the street in front of the speed barns at $1 per cubic yard.

The committee received the following proposition for placing lattice work about exhibition booths in the Exposition Building and also for placing drop siding on sides of dome. The Queal Lumber Company proposed to furnish the lattice, molding and lumber for completing the work for the sum of $441. William Shelton agreed to do all labor connected with building the lattice work and placing drop siding on sides of the dome for the sum of $350. The committee accepted the proposition and instructed the superintendent to notify the parties to go ahead with the work.

A communication from Mrs. W. H. Snider, chairman of the program in the Women and Children's Building, relative to the pageant to be put on in the auditorium, was presented to the committee and $300 was appropriated to be paid to Miss Hathaway to cover all expense for putting on this part of the program.

EXECUTIVE COMMITTEE MEETING.

June 3-4, 1919.

Members present, Cameron, Mullen and Corey.

The committee met for the purpose of accompanying the jury selected by the chief justice for condemning additional land for state fair ground purposes. On account of parties refusing to accept notice it was impossible to proceed with the condemnation proceedings.

The committee requested Mr. F. D. Davidson, assistant attorney general, to serve written notice on Matilda A. Winterrowd that lot No. 2 would be condemned by the sheriff's jury on June 16th.

The matter of sending a representative to witness the aeroplane demonstrations at Minneapolis on June 7th and 8th and Chicago on June 9th was discussed by the committee. The committee directed the secretary to attend these demonstrations and to work in conjunction with Minnesota, South Dakota and Sioux City fairs in securing a desirable aviation feature for the state fair.

The committee approved the plans for the entrances and exits at Grand avenue and Walnut street and instructed the architect to ask for bids to be opened on June 17th.

The committee adjourned to meet on June 16th.

EXECUTIVE COMMITTEE MEETING.

June 16-17-18, 1919.

On June 16th the secretary accompanied the sheriff's jury selected to condemn the following acreage:

Lot two (2) of the partition plat of the L. D. Sims Estate in the north half (N½) of section six (6), township seventy-eight (78) north, range twenty-three (23), west of the 5th P. M., now included in and forming a part of the city of Des Moines, Iowa, except the following parcel: Commencing at a point thirty-three (33) feet south of the northeast corner of said lot two (2); thence west one hundred and fifty (150) feet along the south line of North avenue, now officially known as East University avenue; thence south one hundred and thirty-seven (137) feet; thence east one hundred and fifty (150) feet; thence north one hundred and thirty-seven (137) feet to point of beginning; being the property of Matilda A. Winterrowd, widow.

Mr. L. A. Jester was also employed to appear before the jury and give them an idea as to the value of acreage land near the fair grounds. The jury made the following award:

To Matilda A. Winterrowd, as owner of the above described premises, the sum of fourteen thousand four hundred thirty-six and no-100 dollars; to Herman Auestad, as a tenant of a portion of said premises, the sum of twenty-five and no-100 dollars; to R. W. Hughes, as a tenant of a portion of said premises, the sum of one hundred fifty and no-100 dollars.

We, the undersigned, do hereby certify that we were the jurors appointed to assess the damages in connection with the condemnation of certain real estate to be used as an addition to the Iowa State Fair Grounds; that we came to the city of Des Moines on the 16th day of June, 1919, and were engaged on that date in the assessing of damages pursuant to the appointment; that including the time coming and going we are entitled to compensation as follows:

Name	Days	Expenses	Mileage	Total
H. W. Grout	2	$12.29	106	$42.89
G. W. Speer	1	2.45	22	14.65
Jno. A. Hawkins	2	9.20	70	36.20
Frank S. Wells	1	1.00	6	11.60
J. H. Hahn	1	2.06	24	14.46
C. R. Richards	2	8.15	239	52.05

FEE BILL.

Witnesses	$
On petition	2.00
Summoning and attending jury	5.00
Mileage	.80
Expenses (automobile)	5.50
Serving notices	2.25
Copy fee	13.00
Auditor's fee transfer for recording	.25
Recording proceedings	13.00
Total	$14,824.65

On June 17th the executive committee met with members Cameron, Mullen and Corey present. The committee accepted the award of the sheriff's jury and instructed the attorney general's office to communicate this information to the executive council with a request to officially accept the award.

The committee also met with Charles S. Bradshaw, attorney for Stella M. Henderson and Mrs. Lucinda Short, who has power of attorney for Miss Henderson, with a view of purchasing acreage lot No. 3 containing nine acres. The committee made a proposition that they would pay Miss Henderson $11,500 for the nine acres.

The application of the Fordson Tractor Company for the entire Power Hall was presented to Mr. Mullen and on recommendation of Mr. Mullen the building was assigned to the Fordson Tractor Company for the sum of $600, with the understanding that the entire floor space be occupied with Fordson Tractors and a complete line of agricultural implements.

The committee met with the directory board of the Chamber of Commerce and discussed matters of interest to the fair and business interests of Des Moines. It was the consensus of opinion of those present that there should be closer co-operation between the business men of Des Moines and the management of the state fair.

The proposition of establishing the National Swine Show at the state fair grounds was discussed by the executive board of the Chamber of Commerce and the executive committee of the Iowa State Board of Agriculture.

The following is a record of the action taken.

Vice President Fitzhugh presented the subject of the National Swine Show and the possibility of Des Moines securing this event.

Mr. Corey for the state fair board, stated that the fair grounds and buildings necessary would be placed at the disposal of the show without expense except for the necessary overhead in taking care of the show and the expense of cleaning building and grounds following the show.

Mr. Fitzhugh announced that a cash guaranty fund against possible deficit of $3,000 has been secured. The question of the guaranty fund was discussed by members of the board and officers of the board of agriculture. It was the general opinion that this amount should be increased in order to make a more favorable comparative showing with other cities who were known to have subscribed much larger amounts.

President Cameron stated that in order to increase the amount of the guaranty fund, if the Chamber would raise the amount of $3,500 the fair board would add $500 to this sum, making a total of $4,000 available. It was the sense of all present that this generous offer on the part of the fair board should not be accepted. In order that the necessary additional $500 might be assured the following members of the board volunteered to be responsible for the following amounts:

Mr. Brenton	$100
Mr. Ellyson	100
L. B. Ellis Mfg. Co	100
Mr. Clemens	100
Mr. Fitzhugh	50
Mr. Byers	50
Mr. Sherriff	50

A motion by Mr. Ellyson, seconded by Mr. Clemens, that the offer of the state fair board to add $500 to the $3,500 raised by the Chamber of Commerce, making a total of $4,000 as a guaranty fund, not be accepted, was unanimously carried.

A motion by Mr. Clemens, seconded by Mr. Sherriff, that the Chamber of Commerce underwrite the incidental expenses connected with the upkeep of the swine show as indicated by Mr. Corey, was carried.

A motion that a telegram be sent at once to Mr. Wallace, at Chicago, advising him of the action of the fair board in tendering the free use of the fair grounds and buildings for the swine show and also that he be authorized to guarantee the sum of $3,000 again deficit with further authority to increase this amount to $4,000 if necessary, was carried.

Mr. Ellyson presented the following resolution which was seconded by Mr. Byers and unanimously adopted:

Resolved, That we appreciate the pleasure of the visit of the Executive Committee of the State Fair.

That we realize the mutual advantage of a more intimate relationship between the two associations.

That we respectfully extend to each member of this committee an invitation to meet with this board at any of their Wednesday noon meetings, to present any matters they may feel should be brought to the attention of the Chamber.

President Cameron responded, thanking the board and the Chamber for the spirit of co-operation shown and the hospitality extended to the members of the fair board.

The following bids were received for the construction of the Grand avenue and Walnut street entrances and a ticket booth at Grand avenue:

Sugarman Construction Company, Des Moines	$6,150
Arthur H. Neumann Company, Des Moines	3,854
J. E. Lovejoy, Des Moines	2,990

The committee awarded the contract to J. E. Lovejoy on his bid of $2,990 and the architects were instructed to prepare contract.

The proposition from A. J. Phillips, president of the Iowa division of the National Drum Corp, to furnish the Civil War Veterans' Drum Corp, composed of fourteen pieces, for the period of the fair for the sum of $300 was accepted by the committee and the secretary was instructed to execute contract.

The secretary was instructed to issue an expense warrant for $25.00 to F. D. Albert, president Outdoor Showmen of America, on account of services rendered in connection with his work in Washington, D. C., in securing an exemption of war tax on admissions to state fairs, including grand stand and midway shows; also his work in securing a decision relative to war tax on refreshments served in the grand stand.

In accordance with the resolution of the board of February 6th, delegating all unfinished business to the executive committee with power to act, the committee fixed the salary of the secretary as provided for in senate file 312, at $3,900 per year, commencing July 4th, as provided by statute.

The block between the horse barn and street car entrance in the machinery department, was released by Mr. Mullen, superintendent of the machinery department, and set aside for the purpose of an outside show ring for horses. The superintendent of grounds was instructed to proceed with preparations for the ring under the direction of Dean Curtiss and Secretary Corey.

The committee visited the fair grounds and in company with the superintendent of grounds went over improvements in progress and made a number of suggestions for additional improvements.

The secretary was instructed to purchase sufficient American field fence to enclose the additional ground as per quotation of the American Steel and Wire Company:

26 in., Spec. K. at $1.095 per rod.
58 in., Spec. K. at 2.41 f. o. b. Des Moines.

The secretary was instructed to secure bids for building cement steps and approach to the west entrance to the Exposition Building and to award contract.

The superintendent of grounds was instructed to make the necessary repairs to bleachers in order to put them in a good safe condition.

The superintendent of grounds was directed to proceed with the necessary grading for putting in the entrance at East Thirtieth and University avenue and to proceed to build a fence enclosing the additional ground.

The secretary was authorized to employ an assistant secretary; also a man to take charge of the concession department about July 15th, and a manager for the club dining hall.

The secretary was instructed to issue an invitation to Governor Frank Lowden to address the visitors at the state fair on State Day.

The executive committee and Dean Curtiss went over the tentative plans for the cattle barns with Architect Jones and made suggestions for changes and improvements in the plan.

The secretary was authorized to accompany Mr. Jones to Sioux City for the purpose of inspecting their sale pavilion.

The secretary was authorized to purchase seventeen beds complete from the old Savery Hotel to be placed in the sleeping rooms of the officers and members of the state board of agriculture in the Administration Building, for the sum of $612.00.

The secretary explained to the committee the features of the various flying circuses he had witnessed at the Curtiss Northwest Field, St. Paul, on June 7th; Federal Flying Field, Minneapolis, June 8th, and Ashland Field, Chicago, on June 11th.

The committee came to no decision on any of these aviation features but authorized the secretary to continue negotiations for night aviation features.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING.

July 8-9.

Members present: Cameron, Mullen and Corey.

The committee arranged the following program for special days:

Wednesday and Thursday, August 20-21, Preparation Days.

Friday, August 22, Children's Day and Motor Race Day.

Saturday, August 23, Des Moines Day and Soldiers' Day.

Sunday, August 24, Music Day.

Monday, August 25, Manufacturers' Day and Farm Bureau Day.

Tuesday, August 26, Old Soldiers' Day.

Wednesday, August 27, State and Victory Jubilee Day and Boys' and Girls' Club Day.

Thursday, August 28, Live Stock Parade Day.

Friday, August 29, Motor Race Day and Motor Transport Day.

The committee approved contract let by the secretary to Potts Brothers for building steps at the west entrance to the Exposition Building for the sum of $450.00. The bid of Arthur H. Neumann Company on this job was $644.00.

The secretary was authorized by the committee to have 600 season tickets printed to be sold to exhibitors, concessionaires, etc., at $2.50 each. The ticket to be transferable and to contain a coupon of admission for each day of the fair.

The purchase of a power painting machine for the sum of $250 was authorized by the committee.

The committee approved the purchase of nine and one-half acres of land from Stella M. Henderson for the sum of $11,750.

The committee approved the proposition of the Wingate Company for decorating all buildings for the sum of $1,100, with the understanding that new material will be used in the Stock Pavilion, Agricultural Building and the south two-fifths of Machinery Hall to be decorated in harmony with the north three-fifths occupied by the auto show.

The committee approved the plan of placing a Close-to-Nature House on the north upstairs porch of the Administration Building to be used by the boys employed in the office of the secretary.

The secretary was instructed to order 20,000 gallons of road oil and have it applied on the streets at the fair grounds.

The secretary was directed by the committee to have a sufficient number of uniform sized shields made to be used for signs by exhibitors in Machinery Hall.

The secretary was directed to negotiate with the manager of the 168th Infantry Band to play concerts on Friday and Saturday, August 22d and 23d; also to get in touch with officers of the Legion of Honor and invite them to hold a meeting on Saturday, August 23d, on which day all soldiers will be admitted free.

Mr. Fogelsong submitted a plan for the entrance at Thirtieth and East University avenue; also for the plan of the auto parking and aviation field. The plans were approved by the committee.

The committee met with Mr. J. N. Dine and Mr. J. M. Ombler of the Firestone Tire Company and discussed the plans for a Motor Transport Day during the fair. It was agreed this should be put on from 1:30 to 2:30, Friday, August 29th, the parade to take place in front of the grand stand. A truck and two men to be admitted free and the expense for promoting the proposition to be taken care of by the Firestone Tire Company.

The committee met with Mr. G. W. Hinck, representing The Federal Fliers of Minneapolis, and Mr. F. M. Barnes of Chicago, representing Louis Gertson and Lieut. Walter Pack. The committee received propositions from both parties and accepted the proposition of F. M. Barnes, Inc., to furnish Aviators Gertson and Pack, August 22d to 28th, inclusive, to do both day and night flying. Lieut. Pack is to do night flying on August 28th and make day flights on August 29th for the sum of $4,500.

The committee held a conference with Mr. E. T. Davis, director in charge of the public safety department, and Maj. Ross of Red Oak.

Maj. Ross was invited by the committee to take charge of the public safety department and to select three officers at $7.50, eight sergeants at $5 per day and 150 men at $4 per day to do police duty, the men to be furnished a tent in which to sleep, cots, mattresses and pillows. The men to pay their own railroad fare and meals. Maj. Ross to receive $150 for his services as superintendent of the public safety department.

The committee visited the fair grounds and made recommendations for a number of minor improvements.

The superintendent of grounds was instructed to proceed at once to get the ground in shape for the auto parking and aviation field.

The committee approved payment of bills.

IN VACATION.

July 14.

In accordance with the letter from Mr. J. P. Mullen and telephone conversation with Mr. C. E. Cameron, contract was closed for the 168th Infantry Band to play on Saturday and Sunday, August 22d and 23d, for the sum of $1,250.

July 16.

In accordance with letter from Mr. Mullen and telephone conversation with Mr. Cameron, the secretary and Mr. Deemer, superintendent of grounds, received the following propositions for putting a new roof on the Exposition Building.

Globe Machinery Company, Des Moines, Iowa, proposed to furnish and apply prepared roofing at the following prices, the old shingles to be removed by the superintendent of grounds:
5-ply Security wide lap with extra layer of felt at $7 per square.
5-ply Security wide lap without felt at $6 per square.
3-ply Royal roofing 2-inch lap at $4.90 per square.

The Johns-Manville Company proposed to furnish the following prepared roofing and apply same after the old shingles had been removed by the superintendent of grounds as follows:
4-ply asbestos roofing at $9 per square.
3-ply asbestos roofing at $7 per square.

J. H. Queal Lumber Company proposed to furnish 5/2 red cedar shingles, set out at fair grounds, for $6.30 per 1,000.

William Shelton agreed to remove the old shingles and lay the new shingles for the sum of $3 per square.

The secretary and superintendent of grounds decided to accept the proposition of the Queal Lumber Company. The order was placed for 200,000 shingles.

July 20, 1919.

Members present, Cameron and Corey.

The purchase from George Sims of lot No. 4, containing ten acres, for the sum of $15,000 was approved by the committee.

The secretary and superintendent of grounds were instructed to negotiate with the Des Moines Electric Company to have the high tension line removed from East Thirtieth street and on the north side of the race track and to have a high tension line brought into the fair grounds along the east side of the land bought of George Sims.

The secretary was authorized to employ H. L. Cook to do special publicity work for the daily papers from July 25th until the close of the fair for the sum of $100.

The committee authorized the secretary to sell the house on lot No. 2 condemned by the sheriff's jury for the sum of $1,000.

The secretary was authorized to let contract to Mr. J. E. Lovejoy for constructing the new entrance at Thirtieth and University avenue for the sum of $587.

The committee, with Mr. Deemer, superintendent of grounds, and Mr. Fogelsong, landscape architect, went over the plans for the entrance at Thirtieth and University avenue and plans for the main drives and auto parking and aviation field very carefully. They approved the plan worked out by the secretary and Mr. Fogelsong.

The superintendent of grounds was directed to proceed with the following improvements:

Build a section of pens in the sheep barn just west of the north entrance to take care of the goat exhibit.

Make a change in the feed racks in the sheep pens by placing a ten-inch board in the bottom of each rack.

Remove the pole line north of the race track and construct an electric light line on the east and west street through the auto parking ground.

Place a six-inch hanging gutter on the low roof of the Exposition Building.

Order 100 lawn seats.

Rebuild all the exhibition booths in the Exposition Building and place a three-light fixture in each exhibition booth.

The secretary brought to the attention of the committee a proposition made by Hugh Bennett in which he offered to sell one 60x90 tent, seating for 1,000 people, stage with scenery, piano, wiring for the tent and electric lamps, same being a complete chautauqua outfit, for the sum of $200. The secretary was directed to purchase the outfit for $200, the tent to be used for an assembly tent and the seating to be used for the new horse show ring.

The secretary was authorized to make contract with Mr. C. L. Herring of the Herring Motor Car Company, giving him use of the aviation field for the purpose of carrying passengers during the fair, with the understanding that he is to assume all responsibility for accidents, either to passengers or public. The fair management agreed to stop traffic on the streets at each end of the aviation field while the ships were leaving or landing. It was agreed there would be no charge for this privilege.

EXECUTIVE COMMITTEE MEETING.

July 27, 1919.

Members present, Cameron, Mullen and Corey. Directors Pike and Tow met with the committee.

The committee, together with Directors Tow and Pike, went over the plans for the new cattle barn with Architect Jones.

The committee directed the secretary to accept the two carloads of government exhibits as per proposition submitted by F. Lamson Scribner.

The committee also directed the secretary to accept the proposition for four carloads of war exhibits, consisting of tractor artillery, anti-aircraft guns, etc., and to make a deposit of $1,500 with the adjutant general of the United States to cover the Iowa State Fair share of the expense for transporting the exhibit and sixteen demonstrators over the following fair circuit: Missouri State Fair, Iowa State Fair, Kansas State Fair, Texas State Fair, Texas Cotton Palace.

The secretary was directed to extend to the state branch of the American Legion an invitation to hold their state convention on Soldiers' Day. Saturday, August 23d, at the state fair grounds.

The secretary informed the committee that Mr. C. C. Heer, assistant secretary, had informed him that he must either make his plans to return to law school at Harvard or seek more remunerative employment. The secretary recommended that Mr. Heer be paid $2,400 a year, the same as the deputies in other offices in the State House. The committee approved the recommendation, but requested that the secretary communicate with members of the board, asking their approval of the increase.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING.

August 3-4.

Members present, Cameron and Corey.

The entries received in the live stock departments showed there were applications for approximately 1,500 swine pens, 240 sheep pens, stalls for taking care of 1,250 head of cattle and about 600 head of horses, ponies and mules.

The committee and Superintendent Deemer went over the situation and decided to use cattle barns 17 to 22, inclusive, for swine pens; also to place two 42x80 foot tents in the court of the swine barn and build fifty-two 6x8 foot pens in each tent, use horse barns 3, 4, 5 and 6 for stabling boys' baby beeves and exhibition cattle. This necessitated placing a manger in the front end of the horse stalls so the stalls would not be more than five feet deep.

The secretary was authorized to purchase three dining room tables for the dining room over the baby health department.

The secretary was directed to employ Mr. W. J. Smith as superintendent of the camp grounds.

The secretary was authorized to make arrangements with the highway commission for five or six trucks and drivers for graveling roads in the new ground; also fifteen trucks and drivers to do draying and haul litter from the barns during the fair. The proposition was for the highway commission to furnish the trucks free of charge for the privilege of storing approximately 200 trucks and other road building equipment in the buildings on the state fair grounds from September 1, 1919, to August 1, 1920, the fair management to pay the drivers at the rate of $5.00 per day and to furnish gasoline and lubricating oil for trucks.

The secretary was directed to secure the Hawaiian Singers for Friday, August 29th.

The superintendent of grounds was directed to move the toilet northeast of the roller coaster to a location just north of the transformer station; also move one of the small buildings northeast of the coaster to a location about 250 feet west of the George Sims house, same to be remodeled for toilet for ladies and gentlemen.

EXECUTIVE COMMITTEE MEETING.

August 10-11.

Members present, Cameron, Mullen and Corey.

The committee met for the purpose of arranging details for the daily program and making final arrangements for stabling live stock, etc.

The committee authorized the secretary to rent 2,000 chairs from the

Greater Des Moines Committee for use in seating the Stock Pavilion for the Sunday morning exercises and for the Sunday afternoon and evening concerts for the sum of $50.00.

The committee agreed to furnish Chaplain W. E. Robb a 14x21 tent to be used as headquarters' tent by Chaplain Robb for the purpose of meeting mothers of boys who lost their lives on the battlefields of France.

Professor E. C. Bishop was authorized by the committee to employ two men three days at $4.00 per day, one to have charge of the baby beeves and the other the pigs entered by boys and girls; also one man ten days at $3.50 per day to have charge of tent provided for sleeping quarters for the boys exhibiting baby beeves and pigs.

The committee approved payment of bills.

IN VACATION.

August 10-11.

Superintendent C. F. Curtiss and Charles Rhinehart, of Dallas Center, assigned stalls in the horse department and arranged the daily judging program. On August 11th, H. L. Pike assigned stalls and arranged judging program for the cattle department. On August 13th and 14th, Mr. C. A. Tow and Mr. C. A. Duncan assigned pens in the swine department. On August 16th C. F. Curtiss, superintendent of the horse department, was at the fair grounds during the day making arrangements to stable the horse exhibit.

EXECUTIVE COMMITTEE MEETING.

August 16-29, Inclusive.

The committee held no regular meeting but handled such matters as were brought to their attention at various times during the period of the fair.

The committee also approved payment of contracts for attractions, bills, etc.

MEETING STATE BOARD OF AGRICULTURE.

August 19, 1919.

The meeting was called in the board room of the Administration Building by President Cameron at 1:30 p. m., with the following members present: Cameron, Morrow, Corey, Reeves, Curtin, Tow, Sheldon, Legoe and Pike.

President Cameron explained to the board conditions surrounding the strike of the street railway employes in Des Moines. He stated it might be necessary for the business men and others interested to take up the $105,000 in receiver's certificates in order to induce the men to go back to work and provide street car service during the period of the state fair.

Mr. Legoe moved that Mr. Cameron and Mr. Corey be authorized to attend the meeting of the business men and to co-operate with them in bringing about a settlement of the strike, and if necessary that Mr. Cameron be authorized to purchase not to exceed $5,000 of the receiver's certificates in the name of the state board of agriculture. Seconded by Mr. Curtin. Motion carried.

On motion of Mr. Curtin the board adjourned to meet at the call of the president.

MEETING STATE BOARD OF AGRICULTURE.

August 28.

The board was called to order at 6:30 p. m. with the following members present: Cameron, Mullen, Morrow, Weaver, Davis, Curtin, Tow, Legoe, Curtiss, Sheldon, McHenry, Pike and Reeves.

The purpose of the meeting was to fix the compensation of the assistants in the various departments.

Mr. McHenry moved that the ticket takers in the concession department be paid $3.00 per day. Seconded by Mr. Sheldon and carried.

Mr. Sheldon moved that the assistant superintendents, gate captains and employes in the various departments of like capacity be paid $5.00 per day and the helpers in the various departments that received from $3.00 to $3.50 per day in 1918, be paid $4.00 per day. Seconded by Mr. McHenry. Motion carried.

Mr. Morrow moved that the three assistant treasurers, who are responsible for all money taken in, be paid $200 each. Seconded by Mr. Mullen. Motion prevailed.

With the consent of the board, Mr. Sheldon stated he would pay his two assistant superintendents a fixed sum of $150.00 for first assistant and $100.00 for second assistant.

MEETING STATE BOARD OF AGRICULTURE.

Friday, August 29, 1919.

The meeting was called to order in the board room in the Administration Building by President Cameron at 8:00 p. m. with the following members present: Cameron, Mullen, Corey, Morrow, Weaver, Davis, Reeves, Curtin, Tow, Legoe, Curtiss, Sheldon, McHenry and Pike.

The bills for per diem and expense for the officers and members of the state board of agriculture were presented by the secretary.

Mr. Pike moved that the bills be approved and that the secretary be directed to issue expense warrants in payment for same. Seconded by Mr. Reeves. Motion prevailed.

The officers and members of the board presented payrolls covering the respective departments:

Mr. Pike moved that the payrolls be approved by the board and that the secretary be instructed to issue expense warrants covering amount of each payroll and deposit same with the Central State Bank to the credit of the superintendent's payroll account, and that the superintendents be directed to issue payroll checks against said account. Seconded by Mr. Reeves. Motion prevailed.

The secretary presented a bill for the club dining hall covering expense of the state day banquet and meals for guests and judges in the horse department, amounting to $462.50; also bill for a deficiency in the club dining hall on account of meals served to members of the board and help in the various departments.

Mr. Curtiss moved that the bill be referred to the executive committee and that the committee be authorized to pay same as soon as the correct amounts were determined. Seconded by Mr. Weaver. Motion prevailed.

PROTESTS.

The secretary presented the following protest, which was filed at 3:30 p. m., August 26, 1919:

A. R. Corey, Secretary,
Iowa State Fair.

Sir:—

We, the undersigned exhibitors in the filly section of the Clydesdale Futurity, hereby protest the Clydesdale filly exhibited by South Brothers of Orion, Illinois, on the ground that said filly was foaled prior to January 1, 1918. In support we herewith deposit $20.00.

(Signed) L. C. TICE,
E. A. JONES,
G. W. MERNA,
JOHN SKINNER, JR.

The secretary also presented the report of the veterinarians who examined the filly to determine the age, said report being filed at 8:00 p. m., August 27, 1919:

A. R. Corey,
Iowa State Fair.

Sir:—

We have examined the Clydesdale mare, Majesty Beauty 20865, and state in our opinion said mare is one year old and furthermore in our opinion said mare was born in 1918.

(Signed) D. H. MILLER, Veterinary Surgeon,
A. L. WOOD, Veterinary Surgeon,
P. MALCOLM, Veterinary Surgeon,
HAL C. SIMPSON, Veterinary Surgeon.

Director Curtiss moved that the parties who signed the protest be sent a copy of the veterinarian's report and that the protesting parties be notified that unless additional evidence is produced that the protest not be sustained and that the $20.00 deposited with protest be deposited as miscellaneous receipts of fair. Seconded by H. O. Weaver and carried.

The secretary presented the following communication from the newspaper reporters covering the fair:

We, the undersigned representatives of the press, being without any more substantial means of showing our appreciation, desire herewith to extend our thanks to Mr. C. E. Cameron, president of the Iowa State Fair

Association, A. R. Corey, secretary, and members of the board and other officials, for the courtesies shown us during the period of the exposition.

JACK NEWMAN,
MERLE W. MANLY,
DOROTHY ASHBY,
SAM SMITH,
SEC TAYLOR,
ZELLA DYSERT,
WALTER DE PEW,
W. B. KERR,
FRED POWNALL,
MR. WAGNER,
ALDEN COHN,
JAKE NORENBERSKY,
BLANCHE WINGATE,
MR. YATES,
DOC COOK.

Mr. Curtiss moved the communication be received and be included with the record of the board meeting. Seconded by Mr. Pike. Motion carried.

Mr. Morrow moved that the board set aside $40,000 and that the same be invested in a certificate of deposit drawing 4 per cent interest, the funds to be used for an emergency only. Seconded by Mr. Davis. Motion carried.

Mr. Davis moved that the executive committee be authorized to grade, level and seed the ground north of the race track, the same to be put in first-class shape for aviation field and auto park. Seconded by Mr. Sheldon. Motion prevailed.

The board discussed at length the matter of letting contract for the construction of a new cattle barn and disposition of the old cattle barns.

Mr. Weaver moved that the matter of disposing of the old cattle barns be left with the executive committee and Mr. Pike with power to act. Seconded by Mr. Curtiss. Motion prevailed.

Mr. Legoe moved that the matter of letting contract for the new cattle barn be left to the executive committee and Mr. Pike with power to act, provided, however, that the contract shall not be let without action of the board if the bid exceeds the sum of $160,000. Motion seconded by Mr. Tow and carried.

Mr. Curtin moved that it was the sense of the board that no part of the Administration Building should be rented or used by any organization or on any occasion except the state fair. Seconded by Mr. Curtiss. Motion carried.

Mr. Weaver moved that the matter of determining which buildings might be used by the National Swine Show be referred to the secretary with power to act. Seconded by Mr. Curtiss. Motion carried.

Mr. Pike moved that the secretary be allowed $50.00 to cover extra expense and meals during the fair. Seconded by Mr. Tow. Motion prevailed.

Mr. Morrow moved the board adjourn to meet at the call of the president.

EXECUTIVE COMMITTEE MEETING.

Saturday, August 30.

Members present, Cameron, Corey, Mullen and Director Pike.

The committee inspected the site for the new cattle barn and instructed Mr. Deemer, suprintendent of grounds, to move six of the best frame cattle barns to a location agreed upon east of the site for the new cattle barn, allowing for a sixty-foot street between the new cattle barn and the first frame cattle barn. The six barns to be used for stabling nurse cows.

The superintendent was instructed to wreck the old sheep barns 17 to 22, inclusive, and to proceed with the preparation of the site for the new cattle barn.

EXECUTIVE COMMITTEE MEETING.

September 19-20.

Members present, Cameron, Mullen and Corey.

The committee and superintendent of grounds went over the plans for clearing site for the new cattle barn.

The superintendent of grounds was directed by the committee to dispose of the old residence property south of the Women's and Children's Building for the sum of $250.00.

The committee also directed the superintendent to move cattle barn No. 3 to the location vacated by the residence property and transform same into a dormitory for girls taking part in the girl's club work.

The superintendent of grounds was also directed to haul the granite coping from the west side of the capital grounds to a point east of the new cattle barn, same to be used for a retaining wall when excavation and grading is completed.

The secretary presented the schedule of insurance on frame buildings at the state fair grounds covered under the general form, which expires on September 26th, amounting to $60,000 fire and $60,000 tornado insurance.

The secretary was authorized to have this insurance renewed.

The secretary presented a statement showing settlement made with G. D. Gearhardt, who was responsible for the action, State of Iowa vs. B. F. Wyant, for assault and battery. Mr. Wyant was employed as a guard during the period of the 1919 Iowa State Fair.

The committee approved payment of settlement and authorized the secretary to issue warrants in payment for same.

The committee fixed the salary of Frank Harris, assistant in charge of the stallion registration division at $135.00 per month, and Jeannette Graves, stenographer and clerk, at $110.00 per month.

The committee approved payment of bills.

EXECUTIVE COMMITTEE MEETING.

September 29-30.

The committee met with Cameron, Corey and Director Pike present.

The committee met with Keffer and Jones, architects for the cattle barn and examined the plans, read specifications carefully and made the following suggestions:

Receive an alternate bid for tubular steel partitions between stalls; receive alternate bid for seventeen galvanized iron ventilators in place of wooden ventilators specified in new portion of the barn; increase height of partition between rows of stalls from thirty-two to thirty-eight inches. With these corrections the plans and specifications were approved and the secretary and architect were directed to advertise for bids to be on file on or before 10:00 a .m., Friday, October 24th.

The committee visited the grounds and directed the superintendent to move old cattle barn No. 5 to a point south of speed barn No. 1; place it on a brick foundation twenty-four inches high; increase the width of the barn to forty feet; build in stalls and convert same into a training barn. Move old cattle barns Nos. 7 and 8 to a point east of the lumber shed, same to be used for storage purposes; wreck old barns Nos. 6 and 14 and store lumber in lumber shed. Offer old cattle barn No. 15 for sale for the sum of $250.

The committee accepted the proposition made by George A. Whitney for fifty cents per load for cushion sand removed from pit northeast of roller coaster.

The committee approved payment of bills.

MEETING AUDITING COMMITTEE ON OCTOBER 23-24, 1919.

The auditing committee, F. E. Sheldon, E. M. Reeves and H. L. Pike, met on October 23d and 24th for the purpose of auditing bills. The committee audited and approved payment of claims 15662 to 16326, inclusive, payment of which had been authorized by the executive committee previously.

The committee audited and authorized payment of all unpaid claims.

SPECIAL COMMITTEE MEETING.

For Opening Bids and Letting Contract for Cattle Barn and Sale Pavilion, October 24-26, 1919.

The committee met with Cameron, Mullen, Pike, Sheldon and Corey present; also Karl Keffer, representing the firm of Keffer & Jones, architects for the proposed cattle barn. The purpose of the meeting was to open bids for the construction of a cattle barn and sale pavilion. Bids were received in accordance with the following proposals:

GENERAL CONTRACT PROPOSAL.

Mr. A. R. Corey, Secretary,
State Department of Agriculture,
Des Moines, Iowa.

Dear Sir:—

For the sum of..........................dollars, the undersigned will erect and completely finish the proposed new cattle barn and sale ring to be erected on the Iowa State Fair and Exposition Grounds, Des Moines, Iowa, as per plans and specifications prepared by Keffer & Jones, architects, 201 Hubbell Building, Des Moines, with the exception of the plumbing, electric wiring, and roof covering.

Respectfully submitted,

....

ALTERNATES.

1. In case the Barrett Company Roofing is installed complete, add $.................

2. In case the Johns-Manville Roofing is installed complete, add $.................

3. In case the Sale Ring is omitted, including all work included in same west of a line formed by columns 72-71-50-48-33-30-31, but these columns to be installed, including all connections for the future installation of work omitted; the clear story sash, steel, etc., as shown between columns 71 and 50 and between columns 33 to 30 to remain; the connections between the present north and south barns to remain as shown; the triangle of roof space included between columns 50-47 and 33 to be roofed out with rafters, sheathing, roofing, gutters, etc., as specified for general roof construction (eaves carried through on straight line); the owners to enclose space left open at gable end and under clear story windows, deduct $.................

4. In case an approved make of steel factory sash and frames is installed in Cattle Barn (not sale ring) in place of wood sash as specified, glazing and operators to remain as specified, add $.................

5. In case wood stalls are omitted, including pipe rails over same and hitching rings, deduct $.................

6. In case seventeen 36-inch, 24-gauge galvanized iron ventilators without dampers are substituted in place of seventeen wood ventilators as detailed, add $.................

7. In case skylight glass is factory ribbed wire glass in place of plain factory ribbed as specified, add $.................

8. In case side partitions between cattle stalls are omitted, but partitions and pipe railings between rows of stalls to remain, deduct $.................

Respectfully submitted,

....

PLUMBING PROPOSAL.

Mr. A. R. Corey, Secretary,
Department of Agriculture,
State of Iowa.

Dear Sir:—

For the sum of..........................dollars, the undersigned will furnish and complete the plumbing, with the exception of the plumbing fixtures, as enumerated below, but will install ready for use, such fixtures as the owners select from the lists below at the prices indicated, for the proposed new cattle barns and sale ring to be erected on the Iowa State Fair and Exposition Grounds, as per the plans and specifications prepared by Keffer & Jones, architects of Des Moines, Iowa.

Respectfully submitted,

....

The undersigned will install complete the following makes of plumbing fixtures at the prices indicated:

Globe Machinery & Supply Company fixtures $.................
.... $.................

Respectfully submitted,

....

ELECTRIC WORK PROPOSAL.

Mr. A. R. Corey, Secretary,
Department of Agriculture,
State of Iowa.

Dear Sir:—

For the sum of............................dollars, the undersigned will erect and completely finish the electric work for the proposed new cattle barn and sale ring to be erected on the Iowa State Fair and Exposition Grounds, Des Moines, Iowa, as per the plans and specifications prepared by Keffer & Jones, architects, 201 Hubbell Building, Des Moines.

Respectfully submitted,

....

Address of Bidder.

....

Alternates.

1. In case conduit is omitted and all wire is cleated to joists using porcelain cleats and combined porcelain cleats and rosettes, deduct
$.................

2. In case all electric work in sale ring is omitted, including all work west of a line following columns 72-71-50-48-33-31-30, deduct
$.................

BIDS.

The following bids were received and opened in public by the committee. Practically every contractor submitting a bid had a representative present when the bids were opened and read:

BIDS ON GENERAL CONTRACT FOR CATTLE BARN.

Name	Bid on General Contract	Add for Barrett Roofing	Add for Johns-Manville Roof
J. E. Lovejoy	$177,210.00	$12,000.00	$8,007.44
N. D. Garmer & Co	194,788.00	15,450.00	8,600.00
A. Sugarman	208,000.00	16,000.00	9,000.00
A. H. Neumann & Co.	190,596.00	14,000.00	8,500.00
W. F. Kucharo	204,000.00	15,000.00	8,850.00
Western Const. Co	207,900.00	15,750.00	9,050.00
Chas. Weitz & Sons	180,994.00	14,775.00	8,407.00
J. A. Benson	202,100.00		8,000.00
J. E. Tusant	203,341.00	15,000.00	8,800.00

Name	Deduct Omit Sale Ring	Deduct Omit all Stalls	Deduct Substitute Galv. Iron Ventilators	Deduct Omit Stall partitions
J. E. Lovejoy	$47,926	$ 4,200	$111	$1,475
N. D. Garmer & Co	53,400	7,250		
A. Sugarman				
A. H. Neumann & Co	51,250	7,780		1,953
W. F. Kucharo	53,280	9,800	300	
Western Const. Co		10,570	425	
Chas. Weitz & Sons	33,000	7,900		
J. A. Benson	61,000	10,000	200	4,700
J. E. Tusant	54,000			

BIDS FOR PLUMBING.

Name	For Work	Crane Fixtures	Globe Fixtures
Des Moines Plumbing & Heating Co	$2,271.00	$1,967.00	$2,019.00
Bailey Plumbing & Heating Co	2,904.05	1,771.45	1,817.35
Van Dyck Plumbing & Heating Co	2,360.00		1,848.00
Century Plumbing & Heating Co	2,814.00	1,846.62	1,897.26

Name	Kellog Fixtures	Douglass Fixtures	Kurtz Fixtures
Des Moines Plumbing & Heating Co			
Bailey Plumbing & Heating Co	1,842.00	$1,767.50	
Van Dyck Plumbing & Heating Co		1,646.00	$1,756.00
Century Plumbing & Heating Co	1,850.00		

BIDS FOR ELECTRICAL WORK.

Name	Bid	Deduct Omit Conduit	Deduct Omit wiring for sale ring
Whalen Electric Co	$3,065.00	$600.00	$1,025.00
Citizens' Electric Co	3,090.00		968.00
Capital City Elec. Co	3,161.00	751.00	1,061.00
Electric Equipment Co	3,980.00	700.00	1,100.00

The following were the low bidders on the work, to which the committee added an estimate to cover architect fees and cost of grading:

J. E. Lovejoy, general contract, using Johns-Manville roofing	$185,217.44
Des Moines Plumbing & Heating Co., using Crane fixtures for plumbing	4,238.00
Whalen Electric Co. for electrical work	3,065.00
Architect fees estimated on above bids	5,775.00
Grading to be done under supervision of superintendent of grounds, estimated	1,000.00
Total	$199,295.44

The resolution adopted by the board at the meeting on August 29, 1919, authorized the committee to open bids and let contract for the construction of the cattle barn and sale pavilion providing the total cost did not exceed $160,000. Therefore, the committee decided that it would be impossible to accept the proposals for completing the barn and sale ring in accordance with the plans and specifications as submitted. This announcement was made to the bidders present.

The committee and architect called into conference Mr. J. E. Lovejoy, low bidder on the general contract, and asked him to lay before the committee his estimate sheets on certain portions of the work that the committee might desire to leave out in order to reduce the cost to a sum not exceeding the limit fixed by the board.

It was evident on the face of the bids that the committee could accept the bid of J. E. Lovejoy by taking advantage of alternate bid No. 3, omitting the sale ring entirely, and keep the entire contract within $150,000, the amount appropriated by the thirty-eighth general assembly. The committee, however, was confronted with the following facts: The appropriation was made for the purpose of building the cattle barn and sale pavilion; the breeders of the state of Iowa assisted in securing the appropriation with the understanding that the sale pavilion would be included, and it would result in a material loss to a number of breeders and associations having already made plans for holding a number of sales on the Iowa State Fair grounds as soon as the sale pavilion is completed.

It would also result in a loss to the state of the National Polled Hereford show and sale held annually on the Iowa State Fair Grounds.

The committee and architect, with the assistance of Mr. Lovejoy, proceeded to figure out a plan whereby certain parts of the barn and sale pavilion might be left out, but completing the exterior of the entire barn and sale pavilion. With this plan in view the architect and committee agreed to leave out the following. (The amounts were taken from the estimate sheets and agreed to by Mr. Lovejoy):

For all interior work in sale pavilion, including seating, floor, stalls, etc., as follows:

Excavating for footings	$ 187.50	
Concrete footings and walls	814.00	
Concrete forms	240.00	
Common brick	1,246.20	
Cement floors on ground	1,515.00	
Reinforced concrete steel in platforms for seats	755.00	
Concrete in seat platforms	1,152.00	
Concrete forms for seat platforms	1,396.00	
Concrete topping in seat platforms	518.50	
Structural iron and setting	1,105.00	
Plastering in bathrooms	42.00	
Carpentry and millwork	590.50	
Finishing hardware	137.50	
Misc. (rough hardware, painting, etc.)	196.00	$ 9,895.20
One coat of paint on all structural steel		650.00
Window regulators		1,726.00
Insurance compensation overhead and bond		300.00
Total proposed deductions from general contract		$ 12,571.20

The committee proposed to leave out all plumbing and electrical work:

Plumbing proposal	$ 4,238.00
Electrical work proposed	3,065.00
Total proposed deductions	$ 19,874.20

SUMMARY OF PROPOSALS WITH ABOVE DEDUCTIONS.

J. E. Lovejoy, general contract	$177,210.00	
Johns-Manville roofing	8,007.44	
Add for alternate bid for ribbed wire glass in skylights in place of plain factory ribbed as specified	81.00	
Total	$185,298.44	
Proposed deductions from general contract	12,571.20	
Total general contract		$172,727.24
Architect fees (estimated)		5,200.00
Grading (estimated)		1,000.00
		$178,927.24

The committee decided to submit the two propositions to the board. The first proposition to let contract for the barn and sale pavilion, taking advantage of the deductions and anticipate the use of about $30,000 of the state fair funds. The other proposition to eliminate the sale ring entirely.

The above propositions were communicated to the board by telephone. All members were reached with the exception of C. F. Curtiss. The following members were in favor of the first proposition providing for the construction of the barn and sale pavilion and anticipating the use of $30,000 of the fair funds: Weaver, Davis, Reeves, Curtin, Tow, Legoe, Escher and McHenry. The members present, Cameron, Mullen, Pike, Sheldon and Corey, were also in favor of this proposition.

Mr. Mullen offered the following resolution: That the general contract be awarded to Mr. J. E. Lovejoy on his proposal of $172,727.24, taking advantage of the deductions agreed upon. That the contract provide that the board may at any time, prior to March 1, 1920, take advantage of the original bid calling for the completion of the building in accordance with the plans and specifications, with the exception of the plumbing and electrical work, by agreeing to pay Mr. Lovejoy the full amount of the original proposal, $185,298.44. And that the secretary and architect be directed to make contract with Mr. Lovejoy, requiring a surety bond for the full amount of the contract as provided by law. Seconded by Mr. Pike. Those voting aye: Cameron, Mullen, Pike and Corey. Those voting no: None.

Mr. Pike moved that the committee reject all bids for plumbing and electrical work. Seconded by Mullen. Motion carried. The secretary was directed to pay Architects Keffer & Jones $2,500 on account.

MEETING OF THE STATE BOARD OF AGRICULTURE.

December 11, 1919.

The board convened at 10:00 a. m. with President Cameron presiding. The following members answered to roll call: C. E. Cameron, J. P. Mullen, W. W. Morrow, A. R. Corey, H. O. Weaver, E. M. Reeves, E. J. Curtin, Cyrus A. Tow, T. C. Legoe, C. F. Curtiss, F. E. Sheldon, Charles Escher, Sears McHenry and H. L. Pike.

The secretary read the minutes of board, executive and special committee meetings, commencing with board meeting on February 5 and 6, 1919, and concluding with special committee meeting on October 24th. The minutes were approved as read.

The matter of salary for the treasurer was brought up and Secretary Corey read the law as passed by the thirty-eighth general assembly regarding same. Mr. Corey explained that the board had never fixed the salary of the treasurer since the new law had been enacted. Mr. Weaver moved that the salary of Mr. W. W. Morrow, treasurer, be fixed at $250 per year, commencing July 4, 1919, to conform to the present law and that warrant be issued for the amount due Mr. Morrow ($62.50). Motion was seconded by Mr. Reeves and carried.

Mr. Cameron explained to the board that Secretary Corey had for the past five years been using his own automobile for state fair business; that upon the request of the executive committee Mr. Corey had filed bills amounting to $510.02 for repairs, tires, etc., for the years 1918 and 1919, and the committee would recommend to the board that this bill be paid out of state fair funds. Mr. Curtiss moved the bills as presented for repairs and maintenance of auto be allowed. Mr. Weaver seconded the motion. The motion prevailed.

On motion of Mr. Curtiss, seconded by Mr. McHenry, the board adjourned sine die.

The board immediately reconvened and Mr. B. W. Garrett, clerk of the Supreme Court, administered the oath of office to the newly elected officers and members of the State Board of Agriculture: Cameron, Mullen, Weaver, Escher, Reeves, Pike, Tow and Curtiss.

The secretary called the roll and the following members responded as being present: Cameron, Mullen, Morrow, Corey, Weaver, Reeves, Curtin, Tow, Legoe, Curtiss, Sheldon, Escher, McHenry and Pike.

The next order of business was the election of secretary and treasurer.

Mr. Curtiss moved that Mr. Corey be elected secretary at a salary of $3,900 per year until July 1st, and then $4,000 per year as provided by statute, and that he furnish a surety bond of $10,000, the premium to be paid out of the funds of the department. Mr. Weaver seconded the motion. On roll call the ayes were: Cameron, Mullen, Weaver, Reeves, Curtin, Tow, Legoe, Curtiss, Sheldon, Escher, McHenry and Pike. The nays were none. Mr. Cameron then declared Mr. Corey duly elected secretary for the ensuing year.

Election of treasurer was next in order. Mr. Reeves moved that Mr. W. W. Morrow be elected treasurer for the ensuing year at a salary of $250 and that he be required to furnish a bond of $100,000. Mr. Weaver seconded the motion. On roll call the ayes were: Cameron, Mullen, Weaver, Reeves, Curtin, Tow, Legoe, Curtiss, Sheldon, Escher, McHenry and Pike. The nays were none: Mr. Morrow was declared by President Cameron to be the duly elected treasurer for the ensuing year at a salary of $250.

The board discussed the advisability of providing a house on the fair grounds for the secretary so that he might be in a better position to keep in closer touch with work on the grounds. After thoroughly discussing the subject Mr. Curtiss moved the matter of providing a house on the fair grounds for the secretary be left in the hands of the executive committee. Seconded by Mr. Weaver and motion carried.

Mr. Corey and Mr. Morrow were called in and informed that they had been duly elected secretary and treasurer. After Mr. Corey and Mr. Morrow had expressed their appreciation Mr. Cameron stated there was a communication on file from the board of governors of the Minnesota State Fair which should have the attention of the board at that time.

The secretary was directed to read the letter from Mr. Canfield, secretary of the Minnesota State Fair, and the resolution by the board of governors of the Minnesota State Fair:

Mr. A. R. Corey, Secretary,
Iowa State Fair,
Des Moines, Iowa.

Dear Art:

I enclose copy of resolution adopted by the Board of Governors of the Minnesota State Agricultural Society at its meeting held last Friday.

I have already spoken to you and Mr. Cameron about the matter referred to in the resolution.

We had hoped that it might be possible for you to see your way clear to change your fair dates, so that you could close the fair on Thursday night, releasing live stock Thursday noon and carnival company Thursday afternoon at, say, four o'clock, and the night show Thursday night at the latest.

We expect this coming year to have the fireworks spectacle Saturday night, and should have the carnival company up and in place by Saturday noon, which would mean that it should be released on Thursday afternoon in order to reach here on time.

We desire to co-operate fully with the Iowa Fair Board in all matters regarding the engaging of attractions, the moving of live stock herds on our circuit in the future, as in the past, but you will see that as we must operate a full eight days' fair that unless it will be possible for your board to release attractions and live stock somewhat earlier than this year, it will be impossible in the future for us to have a close relationship in these matters, which we have had in the past. We do not want to find this necessary; but our fair has reached such proportions in size of exhibits and aggregate attendance, that it is absolutely necessary that we operate a full eight days' fair, and therefore cannot advertise an eight days' fair and then only have exhibits in place for six days and part only of the attractions for eight days.

Will you kindly take up this matter at an early date and advise us of your action as soon as possible?

Yours very truly,

THOMAS CANFIELD,
Secretary-General Manager.

RESOLUTION ADOPTED BY THE BOARD OF GOVERNORS OF THE MINNESOTA STATE AGRICULTURAL SOCIETY AT A MEETING HELD ON OCTOBER 3, 1919.

Whereas, The Minnesota State Fair has fixed its dates for holding the 1920 fair from Saturday, September 4th, to Saturday, September 11th, inclusive, and

Whereas, The Iowa State Fair has heretofore failed to release its live stock and various attractions due at the Minnesota State Fair earlier than Friday afternoon and evening preceding the opening of the Minnesota State Fair, thus making it impossible to have the live stock exhibits and other attractions available for the Minnesota State Fair on the opening day thereof, and

Whereas, The Board of Managers of the Minnesota State Fair is duly appreciative of the splendid co-operation existing between the Iowa State Fair and the Minnesota State Fair, thus contributing to their mutual advantage, therefore,

Be It Resolved, That the Board of Managers of the Iowa State Fair be and are hereby requested to so arrange their fair dates if possible, to admit of the release of live stock and other attractions due at the Minnesota State Fair, so that they can reach the Minnesota State Fair Grounds and be in place not later than 8:00 a. m. Saturday, September 4, 1920.

Resolved Further, That inasmuch as the Board of Managers of the Minnesota State Fair has adopted the policy of holding its fairs in future years for not less than eight days, the said Board of Managers of the Iowa State Fair be and are hereby requested to so formulate their policy as to avoid conflicting dates in the years to come.

Resolved Further, That the secretary of the Minnesota State Fair be and is hereby authorized and directed to forward to the secretary of the Iowa State Fair a copy of these resolutions.

Attest: THOMAS H. CANFIELD,
Secretary-General Manager.

Dated at Hamline, Minn., Oct. 7, 1919.

Mr. Curtiss suggested that no action was necessary by the board if the record associations insisted that the resolution adopted by them at the American Royal in November, 1918, be adhered to by the state fairs. Mr. Escher suggested that members of the board who were directors in the various record associations write the secretaries of the record associations and ascertain if it be their intention to withhold prize money according to the resolution unless stock is released by the fair managers at 4:00 p. m. on Friday and accepted up to 9:00 a. m. Monday.

President Cameron stated the dates for the 1920 fair should be fixed at this time.

Mr. Curtiss moved the dates for the 1920 fair be August 25th to September 3d, inclusive, on the same basis as last year. The motion was seconded by Mr. McHenry and carried.

Mr. Reeves then made a motion that the management of the 1920 fair be delegated to the executive committee and elective members of the State Board of Agriculture. Seconded by Mr. Weaver and carried.

The next order of business was the appointment of superintendents for the various departments.

Mr. Curtiss moved the executive committee appoint the various superintendents and present the list of appointments for the approval of the board. The motion was seconded by Mr. Pike and carried.

Mr. Corey explained to the board that on account of the growth of the junior department it would be necessary to have a superintendent for each of the junior and school exhibits departments another year.

The president submitted the recommendations of the executive committee on appointment of superintendents for the following year for the approval of the board:

DEPARTMENT SUPERINTENDENTS FOR 1920.

Public Safety	E. T. Davis, Iowa City.
Admissions	F. E. Sheldon, Mt. Ayr.
Concessions and Privileges	Sears McHenry, Denison.
Grounds	J. H. Deemer, Des Moines.
Live Stock Sanitation	Robt. D. Wall, Des Moines.
Horses, Ponies, Mules	Chas. F. Curtiss, Ames.
Speed	E. J. Curtin, Decorah.
Cattle	H. L. Pike, Whiting.
Swine	Cyrus A. Tow, Norway.
Sheep	Chas. Escher, Jr., Botna.
Poultry	V. G. Warner, Bloomfield.
Implements and Machinery	J. P. Mullen, Fonda.
Agriculture	H. O. Weaver, Wapello.
Culinary and Apiary	H. O. Weaver, Wapello.
Dairy	W. B. Barney, Des Moines.
Horticulture	Elmer M. Reeves, Waverly.
Floriculture	
Exposition Building, Textile, China, etc.	T. C. Legoe, What Cheer.
Junior Department	F. P. Reed, Ames.
School Department	P. E. McClenahan, Des Moines.
Boys' Camp	Fred M. Hansen, Ames.
Boys' and Girls' Judging Contest	P. S. Shearer, Ames.
Publicity and Advertising	
Women's and Children's Building—	
Chairman Program Committee	Mrs. O. A. Olson, Forest City
Art Exhibit	Prof. C. A. Cumming, Des Moines.
State Traveling Library	Julia A. Robinson, Des Moines
Public Health Department	Dr. G. H. Sumner, Des Moines
Baby Health Department	Mrs. Edna M. Wallner, Atlantic
Domestic Science	Miss Neale S. Knowles, Ames.

Mr. Morrow moved the report of the executive committee as read by the secretary be approved. The motion was seconded by Mr. Curtiss and carried.

President Cameron announced to the board that some new arrangements should be made for policing the grounds inasmuch as the present system had been very unsatisfactory for the past two years. The matter and the north side of the east wing of the Exposition Building, that most of these rooms are dark and last year nothing was exhibited in them. They are in a dilapidated state and sooner or later are liable to cause fire for the reason that there are a good many corners in and around same where old papers accumulate and it is difficult to keep them clean. I believe if it could be done, that this department should be placed in some other building and the smaller Art Building should be moved from where it is now located and all of that part of the extra rooms built in between this small Art Building and the east wing of the Exposition Building should be torn out. This would make a great improvement in the looks of the place and reduce the fire hazard greatly.

"I would suggest that the premium list relating to this department be revised, as there are some changes in style and kind of work exhibited each year. It would be well to have some revision to keep up with the times. I am now having this matter gone over and will report later. I would suggest that owing to the fact that the premiums in this department have been reduced somewhat from previous years, we should add $200 or $300 to the premiums this year.

"It would be well if the exhibitors could be somewhat better informed as to when exhibits should be brought to the building and believe that it should be specifically stated in the premium list that all exhibits will be received from Tuesday morning at 8:00 o'clock a. m. until Thursday evening at 6:00 o'clock p. m., provided the fair is running on the same days of the week as heretofore, because if people persist in bringing exhibits on Monday it requires more help and expense to run the department."

Mr. Legoe estimated his recommendations would call for $200 additional prize money.

Mr. Tow next made recommendations for the swine department. Mr. Tow recommended the classification for the principal breeds of swine be increased from $618 to $850 and that the pen rent be increased to either $3 or $5 per pen. He stated the increase in premiums for the principal breeds would amount to $1,392. The board discussed the matter of pen rent for the swine department and Mr. Tow moved that a charge of $5 per pen be made for the next fair. The motion was seconded by Mr. Curtin. The president suggested that the matter be carried over to the February meeting for definite settlement and the motion made by Mr. Tow was withdrawn.

Mr. Pike, superintendent of the cattle department, recommended that $500 be added to the classifications for the four principal dairy breeds. This would call for $2,000 additional premium money for the dairy breeds. He recommended that the baby beef class be divided into four or five classes, offering a class for each breed and a class for grades and crossbreds. He recommended that the board offer a class for pure-bred heifers shown by juniors and that $200 in premiums be offered for each of the four beef breeds. Mr. Pike recommended an increase in stall rent from $2 to $4 per double stall and $1 per head for nurse cows.

Mr. Curtin, superintendent of the speed department, stated he had no recommendations other than that he would like $3,400 additional for purses in the speed department for the next fair.

Mr. Escher, superintendent of the sheep department, recommended that the pen rent in the sheep department be increased from $1 to $2 per pen. Further than that he had no recommendations.

Mr. Sheldon submitted the following written report:

ADMISSIONS DEPARTMENT.

F. E. Sheldon, Supt.

"In making recommendations to the board for improvements under the supervision of the admissions department, I have two matters that I wish to have considered by the board.

"First, I am convinced that the fencing of the camp ground would not only relieve this department of a great deal of bother, work and worry, but I believe that we would get as much or more money for the association by having the ground fenced as we would in attempting to make a round-up every morning as we have done heretofore.

"I believe that there should be at least two entries made to the grounds, one at the main road and one at the road that comes down from the Deemer house. It may be that other entrances would be necessary, but that can be decided later. I believe that campers' tickets should be sold as before and good only at the campers' gate, but not sold at campers' headquarters as heretofore.

"It would be necessary to give a pass-out check on the ground, but this should be good only at the camp ground gate and for one day only, and I think it should be accompanied by the camper's ticket when returned. I am of the opinion that the fence should be run as far west as possible and not get below any of the buildings that are used by the association.

"Second, I believe if the admissions department could employ its own police, making a regular police department with a captain in charge the same as we now handle our pass gate men, that we could systematize this and relieve the department of a great deal of work and worry. Of course the details would necessarily have to be worked out next fall.

"In making this suggestion, however, I want it understood that if by employing our own police for this department it would in any way conflict or hamper the public safety department as now organized, I would not have it considered, for the reason that I am thoroughly convinced that the only way to handle these matters is for each man to handle his own department without interference from other departments. But it seems to me that we could have our own police for the gates, the amphitheater and pavilion and under the jurisdiction of the admissions department. This is a matter, however, that would be left to the judgment of the board.

"There are probably other changes in the department that could be figured out that would be of benefit to us, but if these two meet with the approval of our board, the ones of lesser importance may be taken care of as we come to them."

Mr. McHenry, superintendent of the concessions department, stated he had no special recommendations at this time, but that he was of the opinion that it would be necessary to pay the helpers in his department $4 per day, the same as paid in other departments, and this would add about $600 to the expense of the concessions department.

Mr. Weaver, superintendent of the agricultural department, recommended that more money be offered in the classes for county and individual farm exhibits. He estimated $1,000 or $1,200 additional money should be added to these classes. Mr. Weaver further stated there should be some attractive central feature that would add to the attractiveness of the building.

Mr. Reeves, superintendent of the horticultural department, was next called upon and he made the following report and recommendations:

"While the crop of fruit was much below normal the show of fruit at the 1919 fair was fully up to the usual in quantity and the quality was even better than ever before. Exhibitors are striving to attain the highest standard in quality of fruit shown and in doing so they care for the orchard according to the most approved methods and so not only grow good fruit for the markets, but serve as an example to neighbors and are gradually working up a sentiment in favor of spraying and otherwise caring for the orchards of the state. This will in time put Iowa in her rightful place in the production of apples and other fruit of the highest quality. Considerable interest was shown in the ten and twenty-five-plate displays of the commercial sorts which were planned to encourage the larger grower of but few varieties.

"There is a growing interest in nut culture and in some of the native fruits and these exhibits always attract visitors. During the last two years there have been very few peaches shown as weather conditions did not favor this fruit. At the last fair the plums were also scarce as the crop was almost a failure over the entire state.

"As to changes in the premium list there are but few that I would recommend. I would like to add to the list in each district ten plates of optional varieties with premium on each. I believe also that it will be well to allow all fruit shown to compete in the general display and not require duplicates for this premium. I would also like to add a premium of $100 to be prorated on gift boxes of fruit, the box to be one to two quarts in size and to be arranged with fruit and other edible material."

Mr. Reeves explained that part of his recommendations had been made by Mr. Weaver—that he also would like an attractive feature in the center of the Agricultural Building. Mr. Reeves submitted the following written report and recommendations. He estimated his recommendations would call for $220 additional prize money next year. Mr. Reeves suggested that a concession for selling apples might be sold in his end of the building.

The board next considered the price of admissions to the grand stand and bleachers. It was suggested that the charge for boxes in the grand stand be $1.00, reserved seats, lower half 75c, upper half of grand stand 50c and paddock and bleachers 50c. It was also suggested that 50c admission be charged at the outside gates on Sunday and up until 6:00 o'clock week days.

Mr. McHenry reminded the board that the county fair managers had requested a room for headquarters for their association in the Administration Building. Mr. McHenry moved that headquarters be given the Iowa County Fair Managers' Association in the southeast corner room of the Administration Building and that the secretary be instructed to write the fair managers at once advising them that the board had allowed them space in that room for their headquarters. Motion seconded by Mr. Curtin and carried.

Mr. Morrow's bond for $100,000 was presented. It was moved and seconded that the bond be approved by the board. Motion was seconded and carried.

Secretary Corey read the following letter from Mr. Wesley Greene, superintendent of the floriculture department, in which he tendered his resignation as superintendent of that department:

December 11, 1919.

Mr. A. R. Corey, Secretary,
Department of Agriculture,
State House, Des Moines.

Dear Mr. Corey:—

On account of a desire to retire from public life, I hereby hand to you my resignation as Superintendent of the Floriculture Department, and ask that you present it to the Board for its action. After many years of service for the Board, I wish to retire from active duty as superintendent and I trust you will elect someone to succeed me. .

I wish to express, through you, to the Board my gratitude for the many courtesies received while connected with the department in the discharge of my duty. I shall ever hold in grateful memory the members of the Board for the kind treatment received while connected with the department.

Sincerely yours,

WESLEY GREENE,
Secretary.

Mr. Curtis moved that the board accept the resignation of Mr. Greene and that the secretary be instructed to explain to Mr. Greene our high appreciation of the service he has rendered in that position. Seconded by Mr. Legoe. Carried.

Mr. Warner's report on the poultry and rabbit department was read by Mr. Corey.

POULTRY AND RABBIT DEPARTMENT.

V. G. Warner, Supt.

"The 1919 poultry exhibit was one of the largest and best displays ever put on in the state fair grounds and was handled with a minimum amount of help. The rabbit display crowded the poultry department very much, inasmuch as it was necessary to use about 200 coops for the rabbits. Arrangement for more cooping or staging the rabbit show in another building should be made. I anticipate the 1920 poultry show will be larger and better than this year.

"I would recommend that the north row of flock pens be removed and that two more rows of coops be added and that they be Empire coops or coops of similar construction. I would recommend that a cement floor be put in the entire building. It is no little task with the present tan bark floor to keep the Poultry Building sanitary.

"I also recommend that the parking of autos be prohibited on the west side of the Poultry Building this year. It was almost impossible to see the building or even get through the mass of cars to the exhibit.

"In the premium list, the premium number should be lined up separate or discontinued."

Mrs. W. H. Snider appeared before the board in the interest of the program committee in the Women's and Children's Building. She asked that the board consider the Dudley Watson art attraction for the coming year. Mr. Cameron informed Mrs. Snider that the matter would be taken under advisement and that she would be informed as to the decision later on.

Professor Bishop and Mrs. Frank Reed of the school and junior department, appeared before the board and made recommendations for the junior department. Mr. Reed explained their recommendations would call for $400.00 additional prize money. Mr. Morrow moved that $400.00 be appropriated for the junior department. The motion was seconded by Mr. Curtin and carried.

Secretary Corey informed the board that it would be necessary to employ a publicity man for the department soon. Mr. Weaver moved that the matter of securing a publicity man be left with the secretary and executive committee with power to act. Motion was seconded by Mr. McHenry and carried.

Mr. Corey read the following letter from the assistants in the treasurer's office.

September 4, 1919.

To Members of the Board,
State Agricultural Society,
State House, Des Moines, Iowa.

Gentlemen:—

Not having the opportunity of seeing each of you personally, we take this means of thanking you for the handsome increase in our pay checks for this season and trust that when the accounts are all made up a nice surplus will be found on the right side of the ledger.

Very truly yours,

J. W. HAWK,
A. C. NELSON,
C. A. ISAACS.

Mr. Corey read the following letter from Mr. Cunningham, who was in charge of disabled soldiers at Ames:

September 4, 1919.

Dean C. F. Curtiss,
Ames, Iowa.

My dear Dean Curtiss:—

On behalf of the disabled soldiers and sailors, I wish to extend our appreciation of the courtesy shown us at the State Fair. The work in horticulture, farm tractors and animal husbandry was of the very highest order and the men, without exception, put in far more time than was required in their regular schedule.

They were allowed to enter the judging ring, and it was pleasing to see their eagerness to place a class of stock ahead of the judges and then compare their judgment with that of the officials.

Will you kindly convey to the fair officers the thanks and kind regards of the disabled soldiers and sailors taking training at Ames?

Very sincerely yours,
J. C. CUNNINGHAM,
Chairman Non-Collegiate Courses.

Secretary Corey read the report of the state accountant:

Des Moines, December 7, 1919.

To the Executive Council of Iowa:

Gentlemen—The following is a report of the examination of the Iowa Department of Agriculture for the period from December 1, 1918, to November 30, 1919.

F. H. PAUL, Accountant.
P. E. WOODS, Asst. Accountant.

IOWA DEPARTMENT OF AGRICULTURE.

The examination of this department covers the period from December 1, 1918, to November 30, 1919.

The examination, audit and check of the department is made under the statute requiring that the same shall be made by the state accountant and report submitted to the executive council and board of directors of the Iowa Department of Agriculture before the annual meeting of the board of directors in the month of December.

In making the audit and check we have examined all claims filed for expenses and awards for premiums and pay rolls and all sources from which revenue is received by the department and check them against the records of the department showing the receipts and disbursements for the period covered by this report.

The records show that all funds from whatever source received have been turned over to the treasurer. All claims for expenses and maintenance of the fair and all premium awards made have been carefully examined to ascertain if the proper approval was made by the proper persons and the record approval by the board made, before payment was made.

The checks issued by the treasurer for the payment of claims approved and premium awards have been checked against each and comparisons made to ascertain if proper payments were made. Some checks are outstanding, not having been presented for payment. A list of these is submitted herewith. Premium warrant No. 17616, payable to Raymond Meiske, Nichols, Iowa, was overpaid $5.00, check was drawn for $15.00, should have been issued for $10.00. This overpayment is now in process of adjustment. The payroll account was checked and compared. A list of the outstanding checks is submitted with this report. Check for $1.00, Clarinda State Bank, lost in the mails; check for $1.00 on State Bank of Livermore, unsigned, and check of E. C. Lytton for $12.00 paid since December 1st. The checks on the two banks are now being investigated with a view of obtaining duplicate checks. A few payroll checks issued are not properly indorsed. In explanation of this the superintendent of grounds, Mr. Deemer, and his assistant, Mr. Whitney, were called to the department and stated that this occurred only where men were employed and money was advanced them or board guaranteed or on payment on Saturday night, checks not being furnished until the following Monday by the department. In some instances the time sheet shows a receipt for the pay. The check issued for money advanced or for board guaranteed or paid is the check not properly indorsed. This irregularity will be obviated in the future.

The records show that there is uncollected on contracts for concessions the sum of $241.50, the amount unpaid for last year being $120 and 1917 $282.60.

The board has expended for improvements, permanent repairs and for real estate purchased, the sum of $105,216.08. Of this amount the sum of $61,867.20 was expended for real estate lying north of the land formerly owned by the state.

The Thirty-eighth General Assembly appropriated for the purchase of real estate $54,000.00, a balance heretofore appropriated for purchase of land, viz., $167.75, being used.

The balance of the purchase price was paid by the board.

The board has expended for other than fair expenses the sum of $12,823.53. Of this amount, $1,173.43 was for curbing on East Thirtieth street, which amount was appropriated by the Thirty-eighth General Assembly. The board expended for the maintenance of grounds and buildings the sum of $21,617.51 for this year, for 1918 the sum of $12,217.77 was expended for the same purpose. The total expense other than the fair was $163,542.19. The cash premiums paid for the fair amounted to $85,538.31. The grand total of all expenses paid in this year was $388,737.62. The receipts for the period were as follows:

Receipts from sources other than fair	$ 72,817.13
Receipts from fair other than ticket sales	109,941.05
Receipts for ticket sales, including exhibitors' and solicitors' tickets	211,633.50
A cash balance on December 1, 1918, of	50,486.38
A total of	$444,878.06

The buildings on the grounds are kept insured in companies that are authorized to do business in the state. At the present time the fire insurance amounts to the sum of $149,300.00. The tornado insurance on the buildings amounts to the sum of $203,300.00. The premiums for both amount to $4,963.06.

The contest in spelling by the boys and girls of the public schools of the state brought forth as much enthusiasm this year as that of previous years. A list of the boys and girls winning places in the contest is submitted herewith.

By reference to the tables showing the comparative receipts and disbursements of the fair for 1918 and 1919, it will be seen that the receipts for 1919 were $321,574.55; those for the year 1918 were $251,196.62, a net increase of receipts of $70,377.93. The total cash premiums paid for the 1919 fair was $85,538.31, that paid for the 1918 fair was $72,350.13, a net increase of $13,004.18. The total expense for the fair other than cash premiums for 1919 was $163,542.19, that for the year 1918 was $129,739.63, an increase of $33,802.56.

A summary of the receipts and disbursements of the department as shown by the books and records is as follows:

RECEIPTS.

Cash on hand November 30, 1918	$ 50,486.38
Receipts from sources other than fair	72,817.13
Receipts from fair other than tickets	109,941.05
Receipts from ticket sales	211,633.50
	$444,878.06

DISBURSEMENTS.

Disbursements other than fair or improvements	$ 12,823.53
Maintenance of grounds and buildings	21,617.51
Additions and permanent improvements	105,216.08
Expense of fair other than premiums	163,542.19
Cash premiums paid	85,538.31
Cash balance on hand November 30, 1919	56,140.44
	$444,878.06

The records and books of the secretary and treasurer of the department showing the number and value of the tickets issued, sold and returned have been carefully checked and reconciled. A full accounting has been made. The records kept for non-paid admissions issued by officers and superintendents of various divisions have been checked and compared, which show a gradual increase from year to year. A statement of the same is submitted herewith.

The salary of the secretary and that of the office force as fixed by the board, is as follows:

A. R. Corey, secretary	$3,900
C. C. Heer, assistant secretary	2,400
Publicity Division—no one since Sept. 1, 1919	
Frank Harris, Stallion Registration	1,620
J. H. Deemer, Supt. of Grounds	1,500
Edith K. Heer, clerk	1,500
Jeannette Graves, clerk	1,320
Laura Schulze, clerk	1,200

The board employs extra help as needed.

The receipts and expenses of the ice cream division for this year were as follows:

Receipts	$3,316.45	
War tax 10c on receipts paid		$ 331.64
Expenses paid for supplies, payroll and supt. salary		2,050.55
Balance profit		934.26
	$3,316.45	$3,316.45

The exhibitors' tickets issued for this fair were 1,808 at $2.00 each, amounting to $3,616.00. The unpaid bills on file for the 1919 fair amount to the sum of $140.24. A list of these is submitted. There is due the department on accounts receivable the sum of $1,752.95. A statement is submitted herewith. The budget system is in general use for the department. The records and books of the department are in good shape and up to date. Trial balances are taken and put on record. No money was borrowed this year. The bank pays 2 per cent interest on average daily balance. The department has now $40,000 on certificate of deposit drawing 4 per cent interest. All contracts for improvements on buildings, grounds and new buildings are let on competitive bids to the lowest responsible bidder after due notice has been given. A bond is required as provided by law. The inventory of the department has not been completed for this year. The one compiled last year and published in the year book is submitted herewith. The financial statement and comparative tables prepared by the secretary for his printed report have been checked and compared with the records of the department and found correct.

(Note. The statements and tabulations referred to in this report as being submitted herewith will be found in the report of the secretary.)

President Cameron explained that in building the new cattle barn it has been necessary to wreck and move nineteen frame barns. Six of these were moved to a location east of the new barn and will be used for nurse cows. One was moved to a point south of speed barn No. 1 and converted into a training barn. Two were moved to a point east of the lumber shed and will be used for storage purposes. The large frame barn is to be moved southeast of the Women's and Children's Building and converted into a girls' dormitory. Barn No. 14 was sold for $250 and the balance were wrecked and the lumber stored.

Mr. Cameron also explained that it was necessary to remove brick barn No. 2 in order to provide room for the sale ring and the main entrance to the new barn. The committee made the board of control a proposition to donate and move the roof of the brick cattle barn to a point on Grand avenue west of the Shaver Building providing they would use it in putting up a building to house their exhibit. If they accepted this proposition the committee would recommend fixing up the Shaver Building for the Iowa State College exhibit and turning the present college building over to the junior department for demonstrations and exhibits.

Mr. Weaver moved that the executive committee be authorized to negotiate with the board of control and to rearrange the buildings as outlined by the president. The motion was seconded by Mr. McHenry. Motion carried.

Mr. Legoe moved that all matters relative to the fair that come up for determination between now and the next board meeting be left with the executive committee with power to act. The motion was seconded by Mr. McHenry and carried.

Mr. McHenry moved that the board ratify the action of the executive committee in letting contract for the new cattle barn. Seconded by Mr. Reeves and carried.

Mr. Pike moved that the board adjourn to meet at the call of the president. The motion was seconded by Mr. Curtin and carried.

DECEMBER 31, 1919.

There is presented, herewith, a tabulation showing the number of stallions by breeds and the number of jacks enrolled by the department of agriculture in each county for the year ending December 31, 1919. Also a statement showing the number and character of certificates issued by the department, the fees collected and the amount deposited with the treasurer.

NUMBER AND KIND OF CERTIFICATES ISSUED AND FEES DEPOSITED.

Kind of Certificate	No. Issued	Fees	Total Fees
Pure Bred Stallions:			
Original certificates	366	$ 1.00	$ 366.00
Transfer certificates	428	.50	214.00
Renewal certificates	2,612	1.00	2,612.00
Grade Stallions:			
Original certificates	99	1.00	99.00
Transfer certificates	96	.50	48.00
Renewal certificates	625	1.00	625.00
Pure Bred Jacks:			
Original certificates	192	1.00	192.00
Transfer certificates	140	.50	70.00
Renewal certificates	451	1.00	451.00
Grade Jacks:			
Original certificates	90	1.00	90.00
Transfer certificates	58	.50	29.00
Renewal certificates	259	1.00	259.00
Duplicate certificates	3	.50	1.50
Total fees collected January 1 to December 31, 1919			$ 5,056.50
Total deposited with treasurer			5,056.50

department on accounts receivable the sum of $1,752.95. A statement is submitted herewith. The budget system is in general use for the department. The records and books of the department are in good shape and up to date. Trial balances are taken and put on record. No money was borrowed this year. The bank pays 2 per cent interest on average daily balance. The department has now $40,000 on certificate of deposit drawing 4 per cent interest. All contracts for improvements on buildings, grounds and new buildings are let on competitive bids to the lowest responsible bidder after due notice has been given. A bond is required as provided by law. The inventory of the department has not been completed for this year. The one compiled last year and published in the year book is submitted herewith. The financial statement and comparative tables prepared by the secretary for his printed report have been checked and compared with the records of the department and found correct.

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Mr. Legoe moved that all matters relative to the fair that come up for determination between now and the next board meeting be left with the executive committee with power to act. The motion was seconded by Mr. McHenry and carried.

Mr. McHenry moved that the board ratify the action of the executive committee in letting contract for the new cattle barn. Seconded by Mr. Reeves and carried.

Mr. Pike moved that the board adjourn to meet at the call of the president. The motion was seconded by Mr. Curtin and carried.

DECEMBER 31, 1919.

There is presented, herewith, a tabulation showing the number of stallions by breeds and the number of jacks enrolled by the department of agriculture in each county for the year ending December 31, 1919. Also a statement showing the number and character of certificates issued by the department, the fees collected and the amount deposited with the treasurer.

NUMBER AND KIND OF CERTIFICATES ISSUED AND FEES DEPOSITED.

Kind of Certificate	No. Issued	Fees	Total Fees
Pure Bred Stallions:			
Original certificates	366	$ 1.00	$ 366.00
Transfer certificates	428	.50	214.00
Renewal certificates	2,612	1.00	2,612.00
Grade Stallions:			
Original certificates	99	1.00	99.00
Transfer certificates	96	.50	48.00
Renewal certificates	625	1.00	625.00
Pure Bred Jacks:			
Original certificates	192	1.00	192.00
Transfer certificates	140	.50	70.00
Renewal certificates	451	1.00	451.00
Grade Jacks:			
Original certificates	90	1.00	90.00
Transfer certificates	58	.50	29.00
Renewal certificates	259	1.00	259.00
Duplicate certificates	3	.50	1.50
Total fees collected January 1 to December 31, 1919			$ 5,056.50
Total deposited with treasurer			5,056.50

NUMBER OF STALLIONS AND JACKS ENROLLED BY THE IOWA DEPARTMENT OF AGRICULTURE JANUARY 1, TO DECEMBER 31, 1919.

Counties	American Trotter	Belgian	Clydesdale	Cleveland Bay	French Coach	French Draft	German Coach	Hackney	Morgan	Percheron	Saddle Horse	Shetland Pony	Shire	Suffolk	Thoroughbred	Grade Stallion	Pure Bred Jacks	Grade Jacks	Total
Adair		3	3			4				13			6			6	4	5	44
Adams		3	1				1			9			1			6	9	6	36
Allamakee	2	3	1							25						7	1	1	40
Appanoose		1	2			1			1	10			2			8	7	19	51
Audubon		2	4			2				9			1		1	4	5		28
Benton		8				2			1	17		1				8	4		41
Black Hawk	5	2								13			1			8	2		31
Boone		20	2			1	1			16			2			8	16	6	72
Bremer		4	3			2			4	14						7	2	3	39
Buchanan	1	18				1				15			1			11	9	2	58
Buena Vista	1	5	3							7			4			2	3	1	26
Butler	1	10	3			2				14			4			12	2		48
Calhoun	1	9				3				28			9			8	10	3	71
Carroll		8				4				23	1		5	1		6	24	5	77
Cass	1	4	1			1				17			5			6	9	7	51
Cedar		2				4			1	15						2	7	1	32
Cerro Gordo		7				3	1			11			1			13	2		38
Cherokee		2								11						1	1	3	18
Chickasaw	2	10				3	1			36			5			7	22	1	87
Clarke		4				2				14		1				6	7	11	45
Clay	1	5	1							12			2			9	3	1	34
Clayton	1	16	1			1				27			5			20	5	3	79
Clinton		2				3			1	10			2			5	1	1	25
Crawford		5	1			2	1			18				1		7	14	1	50
Dallas	3	13				5				23	2		6			3	13	3	71
Davis			3			5				15	1					4	5	2	35
Decatur	1	6				3				19			2	1		14	13	8	67
Delaware	1	12	1							10						10	3		37
Des Moines						1	1			4				1		4		2	13
Dickinson		4	2			5				20			4			4	4	5	48
Dubuque	1	4				2				9						10		1	27
Emmet		2	1			2				10			2			4	3	2	26
Fayette	3	7				1				22						9	8	1	51
Floyd	2	3				1				8						9	2		25
Franklin		3	1			3				16			2			2		3	30
Fremont						1	1			13	2		1			12	13	2	45
Greene		8	2			2				18	1		3			7	12	2	55
Grundy		4					1			7		1				4			17
Guthrie	1	9	3			3			1	20		1	4			8	10	6	66
Hamilton		8				2				19			3			11	4	4	51
Hancock		10	4							26		1				11	2	1	55
Hardin	1	3				2		1	1	31						12	5	6	62
Harrison	3	7	2		1	2				21			6			12	11	10	75
Henry		2								24			3			2	8	1	40
Howard		4	3		1	3				8			1			9	3	1	33
Humboldt	1	5	1			2				17			3			7	4	2	42
Ida		3								12							2	1	18
Iowa	1		6							7						5	4	2	25
Jackson		14			1	1				12			3			11	2	1	45
Jasper	1	4	4			2				20		1	2			5	13	2	54
Jefferson		7				3				20			1			4	6	4	45
Johnson	3	2	1			3				24			3			10	4	4	54
Jones	3	4	8							22			2			7	4		50
Keokuk	1	5	1			9				66			2			18	20	4	126
Kossuth		7	4			2	1			27	1	1	3			11	4	3	64
Lee	1					3				14						7	3	5	33
Linn	2	30				3				24			1			11	32	3	106
Louisa	1	3								15			3			4	3	2	31
Lucas		2				1				13			2			9	6	7	40
Lyon		6								17						4	1	1	29
Madison	3	5				4				18			12			4	5	3	54
Mahaska	2	2	1			2				32		1				6	5	5	56
Marion		2	1			4				24	1		1			10	15	7	65
Marshall	3	4	6			3		1		29						5	9	5	65
Mills		1				2				17			4			6	5	4	39
Mitchell		8	2							16			1			6	1		34

NUMBER OF STALLIONS AND JACKS ENROLLED BY THE IOWA DEPARTMENT OF AGRICULTURE JANUARY 1, TO DECEMBER 31, 1919.

Counties	American Trotter	Belgian	Clydesdale	Cleveland Bay	French Coach	French Draft	German Coach	Hackney	Morgan	Percheron	Saddle Horse	Shetland Pony	Shire	Suffolk	Thoroughbred	Grade Stallion	Pure Bred Jacks	Grade Jacks	Total
Monona		3					2			11			2			10	4	6	38
Monroe	2	1				1				12			3			4	9	3	35
Montgomery		1				1	1			12			6			1	6	7	35
Muscatine		1	1			4				17	1					6	2	1	33
O'Brien		3	1			2				19			1			4	2		32
Osceola		2	1	1		2				13			1			2	3		25
Page		6				2				23			7			8	9	13	68
Palo Alto		7				1	1			15			1			17	4	1	47
Plymouth		5								10			1			5	1	3	25
Pocahontas	1	5				3				24			4			9	6	4	56
Polk	1	15				4				17			6			7	7	3	60
Pottawattamie	1	6	5			2				20		1	3			14	4	13	69
Poweshiek		7	3			4				15			4			7	12	6	58
Ringgold	1	8				4				21			3			16	18	12	83
Sac	1	5	1			1				25	1	1				2	8	2	47
Scott		2	3							7			2			5			19
Shelby		5	3			1				19			1			5	2	2	38
Sioux	2	4	1							11						3	2		23
Story		6	4			3				35		1	9			6	11	2	77
Tama		5	1			1				25		1	1			11	6	2	53
Taylor	1	5	2			3				25	1		1			9	10	9	66
Union	1	5				7				30			4			11	10	9	77
Van Buren		1	2			1				13			1			1	8	4	31
Wapello	2	2	1			3				12	1	1	2			4	9	2	39
Warren		3	2			7				22			3			12	8	8	65
Washington		4	1			4				25	1		2	1		5	6	6	55
Wayne		3	1			5		1		23	1		1			9	17	9	70
Webster	1	6	1			1				10			5			6	3	4	37
Winnebago		4	1			3				15			1			5	2		31
Winneshiek	1	9	5			4				18						12	1	1	51
Woodbury		6				7				21			1			5	8	5	53
Worth	1	2				2				8			2			4			19
Wright	1	3				2				19			3			7	8	3	46
Adjoining states	1	5				1	1			14			1			5	3	3	34
Total 1919	72	531	123	1	3	214	14	3	10	1,779	15	13	218	5	1	725	645	348	4,720
Total 1918	140	655	222	1	3	355	24	3	16	2,455	17	30	311	5	1	1,203	606	439	6,486
Total 1917	293	805	258	1	5	434	33	11	30	2,877	36	32	418	7	4	1,731	512	466	7,953
Total 1916	421	866	291	1	10	483	50	14	43	3,249	32	49	455	10	6	2,150	430	496	9,056
Total 1915	592	904	309	3	12	508	58	17	54	3,347	30	56	515	10	7	2,489	357	549	9,817
Total 1914	624	944	332	2	18	516	54	18	55	3,185	28	53	523	9	6	2,686	233	589	9,875
Total 1913	641	863	327	2	22	503	58	17	62	2,864	27	43	504	10	7	2,592	103	578	9,225
Total 1912	689	766	321	1	27	464	72	16	53	2,716	23	33	485	5	8	2,449	52	509	8,689
Total Pure Bred Stallions Licensed 1919																		3,002	
Total Grade Stallions Licensed 1919																		725	3,727
Total Pure Bred Jacks Licensed 1919																		645	
Total Grade Jacks Licensed 1919																		348	993
Grand total																			4,720

PART II

Proceedings of State Agricultural Convention

TUESDAY, DECEMBER 9TH, SAVERY HOTEL

The twelfth annual meeting of the Iowa Fair Managers' Association was called to order at 10:00 a. m. by President H. S. Stansberry. The program was carried out in full and the papers, addresses and discussions will appear in full in the Iowa Year Book of Agriculture.

WEDNESDAY, DECEMBER 10, 1919.

The Chairman (President C. E. Cameron): The convention will please come to order. In opening this morning we will be favored by a solo by Mr. Koons of T. Fred Henry's Band.

The Vice President (J. P. Mullen): The next topic on the program is the annual address of the president.

Mr. Chairman and Members of the Sixty-fourth Annual Agricultural Convention:

PRESIDENT'S ADDRESS.

C. E. Cameron—Alta.

We have again assembled to transact the business for the coming year and to hear the reports of its stewardship for the past year and I am sure that when you hear the report of the secretary who has made a detailed statement of all the business transacted in the last year, including the holding of one of the greatest state fairs in its history, you will be proud of the fact that you are a part of this great institution. The attendance and receipts exceed those of all past years by a large percentage. Not only was this a banner year for the state fair, but all the county and district fairs were successful beyond expectations, except when bad weather interfered.

I am glad to see so many representatives of the county and district fairs present, and I do not believe it is altogether due to the withholding of that $100 from your annual appropriation. You are interested in fair work and it is here that you can rub elbows with your fellow fair workers and go home with some new ideas to better your fair and increase your attendance. I hope that through your attendance at the meetings of yesterday and last night you have been more than repaid for the time you have spent in coming.

A few years ago the Iowa State Fair started an innovation by holding the fair for a part of two weeks. Some of the other state fair managers predicted that it would be a failure. On the contrary it has been a wonderful success and now other state fairs are clamoring for a longer time in which to hold their fairs. Iowa at one time held the first fair in the state fair circuit. Others have seen what wonderful success we have had and some have come in and taken part of our first week and now some fairs following us are demanding that we close our fair on Thursday of the second week. It has been my prediction for some time that these conditions would follow. To overcome these objections it will be necessary for us to pay more attention to the resources of our own state and there is no state in the Union that has the natural resources to carry on a successful fair as the great state of Iowa.

We have the agricultural exhibits, as Iowa ranks seven times first in agricultural products. We have the finest horses, cattle, swine and sheep of any state in the Union. This was demonstrated this year when the live stock record associations passed a resolution that no special premium money would be paid at any fair which did not accept live stock from another fair up to 9:00 o'clock Monday morning and release same at 4:00 p. m. the following Friday. The result was that live stock showing at another fair could not be in place for judging until Monday of the second week of our fair. Prior to this year our rule has been that all live stock should be in place by Friday morning of the first week of the fair. Hence we were confronted with the possibility of having no judging on the first two days of the fair. To overcome this we made classes for Iowa breeders who had never shown stock at the Iowa State Fair. We were more than pleased with the exhibits in these classes and were thus enabled to have a good judging program on Friday and Saturday.

This institution has grown to such proportions that it is impossible to confine it to a one-week fair and if it becomes necessary to utilize only the resources of the state we can still hold the greatest agricultural fair in the Union. Our grounds are becoming more fully equipped with permanent buildings. With the contract just let for a brick and steel cattle barn with a capacity of 1,500 head of cattle the list of permanent buildings for stock exhibits is complete.

Not only has Iowa become a great live stock state, it is becoming a manufacturing state, and there is no place where these products can be better shown than at the Iowa State Fair and Exposition with an attendance this year of over 425,000 people. We cannot handle all these people in five days and it is an injustice to the exhibitors who have spent thousands of dollars to place these exhibits to give them only a five-day fair.

My prediction is that in the near future it will be necessary to carry this fair two full weeks. One reason for this prediction is the enormous expense necessary to carry on a fair with the increase in premiums and other expenses that follow and if we should have a rainy week it would almost bankrupt the fair. Another reason why we should have a two weeks' fair—I think I have stated this in some of my former addresses—

is that farmers are so situated that they cannot all come the same week. Part of the family comes one week and the balance the next. With our camping facilities increasing each year a family can procure a tent for the full time. Part of the family may use it the first week and the rest the last week. Our tenting facilities this year were swamped really before the fair commenced, as all the tents were taken by Friday of the first week of the fair.

As an illustration of the percentage of Iowa live stock that is exhibited at the fair, there were 666 horses entered, 588 of which were entered by Iowa exhibitors and 55 per cent of the premium money was awarded to Iowa exhibitors. There were 1,298 cattle exhibited and of these Iowa furnished 921 and won 65 per cent of the premiums. Of the 3,774 swine entered, 3,481 were entered by Iowa exhibitors, to whom was awarded 89 per cent of the premium money. There were 784 sheep entered, of which 555 were entered by Iowa exhibitors and 81 per cent of the premium money was awarded to Iowa sheep breeders. So you see by the report of premiums won in all the stock departments that Iowa breeders won over 72 per cent of all the premiums, and it is because of this fact that I say if it becomes necessary for Iowa to hold her fair for the best interests of her own resources she is in a position to do so regardless of conflicting dates with other fairs. I hope this will not become necessary, but we will have to protect our own interests.

The boys' and girls' club department has outgrown its quarters and it will be necessary to provide more adequate space, for I consider this department the most interesting and instructive of any of the departments of the fair. It is to this new blood that we will have to look to carry on the great work of insuring the future success of the fair. Our plans are not fully matured. The executive committee will recommend to the incoming board plans for enlarging these departments in the way of a larger exhibit in the boys' and girls' department; in the way of a larger exhibit building, in a dormitory for the girls, and other improvements. No one could view the parade of 1,500 boys and girls which marched before the grand stand this year and not feel proud that he was a citizen of this great commonwealth. These young people represented canning clubs, baby beef clubs, pig clubs and, in fact, everything I think that Iowa is interested in. So let's take good care of them, for they will make the fair greater in the future.

A few years ago I made the prediction in one of my addresses to this body that land in Iowa in the near future would be selling at from $300 to $500 per acre. That has come true. No doubt the war brought this condition about sooner than natural conditions would have done. However, it is here and it is here to stay. People ask me if I think this land will stay at that price and I say it certainly will. It may not go any higher for some time, but I do not think it will go back.

Do you expect farm products to go back to the same level as they were before the war? I do not. Wages and everything else that enters into the production of the farm have gone up. The government contracted an enormous debt during the war and the debt was contracted during the period of high prices, and if prices should now decline to the same level as before the war we could never pay off this debt.

In my opinion the farmer will continue to sell his hogs for $10 per 100 and over and his corn for $1 per bushel and other things in proportion for some time to come.

Don't keep on talking about lowering prices, but talk about equalizing conditions, and when you have done that you have solved the condition of unrest which now exists among our people. It will take some time to do this, but I have great faith in America, for she has never yet tried to do anything and failed.

The Chairman: The next will be the appointment of committees on credentials and resolutions.

Credentials committee—E. J. Curtin, Winneshiek; G. H. White, Mills; J. C. Beckner, Page.

Resolutions committee—R. S. Stanberry, Webster; I. S. Bailey, Poweshiek; C. E. Hoffman, Cass.

If any of you gentlemen have your credentials and have not handed them in, bring them up to the table at this time. I want to say to you, gentlemen, that the law governing the appropriation provides $100 shall be withheld from your state aid unless you have a delegate in attendance at this annual meeting. The only way we can comply with the law and know that you are in attendance is from the report of the credentials committee which will be made this afternoon and you should answer when your name is called. You should all be here when the report of the credentials committee is made.

We will now listen to the report of the secretary, and I am sure you will be pleased with the report. I take pleasure in introducing to you our secretary, and, yet, I think he needs no introduction. Mr. A. R. Corey.

The Secretary:

Mr. President and Gentlemen of the Convention:

Don't be alarmed, I am not going to read this printed report. The report of the secretary is so large that I haven't the time nor the inclination to read it to you at this time. It takes a report of some 60 or 80 pages to cover the state fair thoroughly. I have tried to prepare a report that will set out in detail all transactions of the Iowa State Fair. Our financial statement is complete in every detail. You will also find tabulations containing statistics with reference to the various departments, the attendance at the gate, the attendance at the grand stand, the attendance at the stock pavilion, and also comparative statements of the premiums paid. There is also included a complete report of the speed department and the report of Mr. Morrow, our treasurer, so that it makes the report complete in every detail. There is also the certificate from the bank showing the amount on deposit to the credit of the department December 1, 1919.

I know you want to get along with the program just as fast as you can because a good many would like to leave on the early trains, so I am submitting this printed report for your approval and I hope you will take a copy of it home with you. I thank you.

The Chairman: The next on the program is the report of the treasurer, but Mr. Corey has said the report of the treasurer is included in the printed pamphlet so Mr. Morrow, who is present, will not be called upon for a report unless he has something to add.

The Treasurer (Mr. W. W. Morrow): The secretary has made a detailed statement and you will find the treasurer's report in the booklet that he has had printed.

The Chairman: I want to say further that in the report of the transactions of the fair for the year, years ago we had a finance committee that was appointed from this body to check up this institution, but now this department is checked up just the same as every other department in the state house. The expert accountants of the state check our department and make report to the governor of the state just the same as he does for the auditor of state, the secretary of state and all other state departments. Of course we can, therefore, dispense with the appointment of a finance committee.

REPORT OF SECRETARY

A. R. COREY

The following report covers the 1919 Iowa State Fair and Exposition in detail with the exception of the awards, which will be published in the Iowa Year Book of Agriculture.

A more lengthy report of the other duties of the department will be included in the Iowa Year Book of Agriculture and the supplement to the Year Book covering the Stallion Registration Division.

In brief, the functions of the Department of Agriculture, in addition to managing the state fair, are as follows: Edit and publish the Iowa Year Book of Agriculture; conduct the Stallion Registration Division; collect farm and crop statistics with the co-operation of the township assessors and county auditors; tabulate and disseminate this data to the public; conduct the Publicity Department which issues a publication known as "Greater Iowa;" receive and audit the reports of the county and district fairs; certify as to the correctness of these reports to the state auditor and forward the state aid due each fair; receive and audit reports of the farmers' institutes and short course associations and forward state aid due each organization.

STALLION REGISTRATION DIVISION

The department enrolled and issued certificates during the period from January 1 to November 30, 1919, for 2,957 pure bred stallions, 722 grade stallions, 641 pure bred jacks and 347 grade jacks.

The number of certificates issued show a decrease of 1,659 pure bred stallions, 473 grade stallions, an increase of 44 pure bred jacks and a decrease of 93 grade jacks. There was a total decrease of 1,732 stallions and 49 jacks during the year 1919.

The records show that 80 percent of the stallions and 65 percent of the jacks offered for public service in the State of Iowa are of pure breeding. The supplement to the Year Book will contain a complete report of the division and a directory of stallions and jacks with the name of the owner.

The following tabulation shows the number and kind of certificate issued, the fees collected and the amount deposited with the treasurer:

Kind of Certificates Issued	No. Issued	Fees	Total Fees
Pure Bred Stallions:			
Original certificates	354	$1.00	$ 354.00
Transfer certificates	415	.50	207.50
Renewal certificates	2,603	1.00	2,603.00
Grade Stallions:			
Original certificates	98	1.00	98.00
Transfer certificates	94	.50	47.00
Renewal certificates	624	1.00	624.00
Pure Bred Jacks:			
Original certificates	190	1.00	190.00
Transfer certificates	129	.50	64.50
Renewal certificates	451	1.00	451.00
Grade Jacks:			
Original certificates	88	1.00	88.00
Transfer certificates	55	.50	27.50
Renewal certificates	259	1.00	259.00
			$5,013.50
Deposited with Treasurer			5,013.50

COUNTY AND DISTRICT FAIRS, 1919

Ninety-three county and district fairs were held during the season of 1919 and filed reports with the Department of Agriculture for state aid. This is four more than were held during the year 1918.

The reports would indicate the fairs were unusually successful this year. The live stock exhibits were the largest in the history of the fairs and judging from premiums paid other departments were equally well filled.

The attendance was 1,580,643, or about forty per cent more than last year.

The total receipts were $1,055,089.14. This is an increase of $365,620.12 or fifty per cent more than last year. The receipts at the outside gates were $567,273.53. This is an increase of $184,326.08 over last year. The receipts at the grandstand were $143,263.06, an increase of about one hundred per cent over last season.

The receipts for concessions were $111,695.11; advertising in premium list and programs $24,865.20 and miscellaneous receipts $88,885.40.

The receipts on account of state aid amounted to $90,508.50. This is $39,460.14 more than the fairs received the previous season. The average state aid for each fair was $973.21 as compared with an average of $573.57 in 1918. Twenty-one of the fairs drew $1,500 each, the maximum amount under the state law.

The total expense of the ninety-three fairs was $873,268.00, an increase of $221,325.28, or about thirty-three per cent increase over the cost of fairs in 1918.

The premiums paid, not including amounts offered for speed events, amounted to $174,633.07. Purses for speed events amounted to $176,905.35; music and attractions $252,546.57 and miscellaneous expenses of the fair $269,183.01.

Seventy-three fairs made a profit of $199,680.55 and twenty met with a loss of $17,859.41. The net profit for the ninety-three fairs was $181,182.14. It is of interest to note that the state aid is the life of a great many fairs. If this fund were not available a number would not be able to continue the work in their community. Eliminating the state aid from receipts forty-three fairs show a loss and fifty a profit.

There is presented herewith, four tables giving detailed information for the individual fairs.

Table No. 1 sets out the receipts and expenses of the fairs for the year 1919 and also shows the profit or loss. This table does not take into consideration balances on hand at the beginning or close of the season, or any expenditures for improvements, repairs, etc.

Table No. 2 is a financial statement of all the fairs and shows the total receipts and disbursements from all sources and the balance on hand, or overdraft. The present value of the grounds and buildings is set out in one column and the present indebtedness in another.

Table No. 3 shows the number of exhibitors at each fair and the number of horses, cattle, swine, sheep and poultry on exhibition and the amount paid in premiums in each division.

Table No. 4 sets out the total attendance, total number paid admissions at outside gates and day and night grandstand; also the admission fees charged at outside gates and grandstand.

Each of the four tables carries for comparative purposes the totals for the years 1915, 1916, 1917 and 1918.

The following is a copy of the state law providing state aid for county and district fairs as enacted by the Thirty-eighth General Assembly.

The law provides a substantial aid to all fairs offering a liberal prize list and should result in building up the exhibits and educational side of the fairs.

CHAPTFR 175, ACTS OF THE THIRTY-EIGHTH GENERAL ASSEMBLY

SEC. 1. *Repeal and substitute.* That the law as it appears in section sixteen hundred fifty-eight (1658) and section sixteen hundred fifty-nine (1659) supplement to the code, 1913, and section sixteen hundred sixty-one-a (1661-a) supplemental supplement to the code, 1915, be and the same are repealed and the following enacted in lieu thereof:

SEC. 2. *Premiums.* County and district fair or agricultural societies may annually offer and award premiums to further the interest in and to encourage the improvement of live stock, agricultural and educational products, implements and mechanical devices, articles of domestic industry and such other articles as they may think proper, and so regulate the amount thereof and the classification as to induce general competition.

SEC. 3. *Report—State aid—Failure to report—Diminution of aid.* Any county and district fair or agricultural society upon filing with the secretary of the state board of agriculture a report as herein provided for shall be entitled to receive from the state treasury a sum equal to seventy per cent (70%) of the first one thousand dollars ($1,000) and sixty per cent (60%) of all subsequent amounts in excess of one thousand dollars ($1,000) paid in cash premiums at its annual fair for the current year, but in no case shall the amount paid to any fair or society exceed the sum of fifteen hundred dollars ($1,500) in any one year.

When any county and district fair or agricultural society fails to report, according to law, on or before the first day of November, that fair or society shall not receive a warrant from the state auditor for that year, but the secretary of the state board of agriculture shall notify the county auditor of the county in which the fair or society is located of such failure and the board of supervisors may appoint a delegate to the state agricultural convention, said delegate to be a resident of said county, and any county or district fair or agricultural society failing to have an accredited delegate in attendance at the state agricultural convention the second Wednesday in December of the year in which said fair was held shall have the amount of state aid which it would otherwise receive diminished in the sum of one hundred dollars ($100).

SEC. 4. *State board of agriculture—Statements filed with—List of awards, etc.* On or before the first day of November of each year the president, secretary and treasurer of each county and district fair or agricultural society claiming the benefit under this act, shall file with the secretary of the state board of agriculture a sworn statement of the actual amount of cash premiums paid at the fair of the current year, which must correspond with the published offer of premiums and a further sworn statement that none of the amounts were paid for speed events, or to secure games or amusements, and that no gambling devices, sale of intoxicating liquor, or other violations of the law were permitted on the grounds of such county and district fair or agricultural society. The said statement shall also contain a full and complete statement of receipts and expenditures and other statistical data relative to exhibits and attendance for the current year.

Each county and district fair or agricultural society shall annually publish an itemized list of the awards, and a financial statement of receipts and disbursements for the current year in one or more newspapers of the county. A copy of the published list of awards and financial statement, with proof of publication, shall accompany the statement filed with the secretary of the state board of agriculture.

SEC. 5. *Warrants by state auditor conditional.* The auditor of state is hereby authorized and directed to draw warrants on the state treasurer for the funds hereinabove appropriated in favor of the several county and district fairs or agricultural societies who shall have complied with the provisions of this act. The auditor of state, before issuing a state warrant in favor of such county and district fair or agricultural society for any amount shall demand the certificate of the secretary of the state board of agriculture that said fair or society has filed a report as provided for in this act, and upon the receipt of said certificate the auditor of state shall issue his warrant for the amount to which said fair or society is entitled, less the sum of one hundred dollars ($100), which amount shall be withheld and paid to said fair or society by warrant of the state auditor only upon certificate of the secretary of the state board of agriculture that said fair or society had an accredited delegate in attendance upon the state agricultural convention as hereinbefore required.

SEC. 6. *Bona-fide exhibition—Incorporation under state laws.* Wherever the term "county and district fair or agricultural society" occurs in this act it shall be held to mean a bona fide exhibition of live stock, together with agricultural products and farm implements and one duly incorporated under the laws of the State of Iowa.

TABLE NO. 1—RECEIPTS AND DISBURSEMENTS

Number	County, City or Town	Receipts					
		Ticket Sales		Entry fees speed department	Concessions and privileges	Advertising in premium list and program	Miscellaneous receipts of fair
		Outside gate	Grand stand				
1	Adair, Greenfield	$ 4,688.05	$ 198.20	$ 50.00	$ 529.25	$ 164.00	$ 269.60
2	Adams, Corning	3,790.35	300.72	1,290.00	973.00		199.75
3	Allamakee, Waukon	2,378.95	136.45	160.00	833.78		202.80
4	Audubon, Audubon	6,164.50	1,144.35	330.00	1,015.15		1,401.45
5	Benton, Vinton	7,283.20	1,166.24		1,341.75		428.24
6	Black Hawk, Cedar Falls	9,962.31	4,397.71	535.00	1,812.00	1,332.00	1,916.35
7	Black Hawk, Waterloo	18,700.75	7,879.45		1,514.58	1,412.25	12,550.60
8	Boone, Ogden	3,450.50	230.90	295.00	812.80	127.00	874.64
9	Bremer, Waverly	11,294.56	3,368.00	670.00	1,914.68	1,126.81	2,149.11
10	Buchanan, Aurora	1,339.50		7.00	117.50	366.25	59.25
11	Buchanan, Jesup	2,642.06			519.50	549.00	699.40
12	Buena Vista, Alta	6,901.20	845.25	440.00	1,217.50	187.50	2,856.74
13	Butler, Allison	4,711.80	520.10	80.00	629.50	372.50	369.81
14	Calhoun, Manson	6,099.70	1,084.65	83.75	1,177.00		183.50
15	Calhoun, Rockwell City	5,037.50	678.30	490.00	1,38[illegible].50		1,127.87
16	Carroll, Carroll	3,270.15	392.80	330.00	874.25	365.00	563.67
17	Cass, Atlantic	12,294.00	1,831.75	260.00	1,496.00	10.00	2,220.15
18	Cass, Massena	2,529.25	210.85	85.25	259.00		19.00
19	Cedar, Tipton	6,346.50	1,226.75	406.00	802.00	172.75	623.01
20	Cerro Gordo, Mason City	16,449.10	8,076.25	1,037.50	2,758.94	751.60	1,865.90
21	Clarke, Osceola						550.00
22	Clay, Spencer	13,710.67	5,078.00		2,823.75	100.00	2,955.00
23	Clayton, Elkader	3,175.50	287.25	190.00	52[illegible].72	494.00	46.50
24	Clayton, National	2,300.80	121.15		150.80	240.50	192.30
25	Clayton, Strawberry Point	2,797.85	619.55	222.50	595.00	321.00	953.62
26	Clinton, DeWitt	9,968.60	2,317.91	240.00	1,439.50	590.00	1,237.04
27	Crawford, Arion	2,650.75	171.25		493.00		184.35
28	Dallas, Waukee					137.50	1,766.25
29	Davis, Bloomfield	5,140.55	2,082.05	295.00	999.25	142.00	714.55
30	Delaware, Manchester	5,476.75	1,104.80		1,609.75		1,156.69
31	Des Moines, Burlington	16,259.27	13,326.65	832.50	4,665.91	106.00	1,122.57
32	Dickinson, Spirit Lake	3,598.36	615.25	238.00	470.00		228.18
33	Fayette, West Union	9,527.30	1,197.75	230.00	1,915.50		606.08
34	Fremont, Hamburg	3,138.03			317.00		237.00
35	Greene, Jefferson	6,233.00	2,813.00	6.00	502.56		412.50
36	Grundy, Grundy Center	3,987.59	526.75	650.00	610.00		682.00
37	Guthrie, Guthrie Center	3,194.34			705.55	71.00	495.50
38	Hamilton, Webster City	2,560.86			278.00	917.50	379.72
39	Hancock, Britt	6,023.67	605.75		1,364.45		3,026.55
40	Hardin, Eldora	4,353.50	647.35	418.50	1,178.00		457.70
41	Harrison, Missouri Valley	4,590.45	648.50	151.25	566.35		207.68
42	Henry, Winfield	1,738.75	405.75	91.25	143.00		264.70
43	Henry, Mt. Pleasant	11,226.50	2,845.25	1,690.30	2,558.27		1,820.36
44	Humboldt, Humboldt	5,750.35	1,025.75	75.00		210.00	1,304.00
45	Iowa, Williamsburg	3,334.82	339.85	365.00	348.50	230.00	251.40
46	Jackson, Maquoketa	6,171.45	1,082.25		413.50	384.00	218.47
47	Jasper, Newton	3,597.80	1,488.25	347.50	617.00		413.00
48	Jefferson, Fairfield	3,464.25	797.25	360.00	545.00		966.55
49	Jones, Monticello	7,048.35	1,825.15	230.00	1,289.00	592.50	69.75
50	Jones, Anamosa	3,578.50	1,363.05	325.00	388.80		
51	Keokuk, What Cheer	483.50	105.25	180.00	363.95		299.50
52	Kossuth, Algona	8,833.25	851.90		2,093.00	31.24	869.78
53	Lee, Donnellson	2,791.65	135.00	93.75	462.50	313.00	201.32
54	Lee, West Point	1,492.25			138.50	429.00	429.45
55	Linn, Central City	7,174.44			974.00	244.00	970.16
56	Linn, Marion	3,578.69	1,750.00	600.00	453.00	200.00	952.84
57	Louisa, Columbus Junction	6,615.45	2,424.70	599.87	907.62	234.00	887.50
58	Lucas, Derby	981.50			60.00		227.27
59	Lyon, Rock Rapids	10,651.40	1,494.95	537.40	1,874.00	631.00	699.55
60	Mahaska, New Sharon	2,504.91	868.60	85.00	405.50	85.00	149.75
61	Mahaska, Oskaloosa	20,432.50	6,382.00		1,978.85	304.10	3,101.12
62	Marion, Knoxville	7,573.18	2,699.15	832.00	1,896.55	786.00	1,195.67
63	Marion, Pella	2,245.50	990.25	230.00	310.50	306.00	274.65
64	Marshall, Marshalltown	13,135.75	2,625.25	762.50	2,734.70		1,056.04

OF COUNTY AND DISTRICT FAIRS IN IOWA IN 1919.

Receipts		Disbursements						
State aid	Total receipts of fair	Premiums other than for speed	Speed premiums	Music and attractions	Miscellaneous expense of fair	Total expense of fair	(+) Profit (—) Loss	Number
$ 1,018.87	$ 6,917.97	$ 1,531.45	$ 1,392.70	$ 1,310.00	$ 2,512.55	$ 6,746.70	$ 171.27+	1
313.98	6,867.80	519.98	3,368.08	1,350.00	851.05	6,089.11	778.69+	2
570.01	4,281.99	814.30	1,040.00	929.00	1,917.06	4,700.36	418.37—	3
1,013.32	11,068.77	1,522.20	3,241.10	2,272.00	1,450.19	8,485.49	2,583.28+	4
1,500.00	11,719.43	3,336.00	2,152.50	4,339.00	4,092.14	13,919.64	2,200.21—	5
1,500.00	21,455.37	4,768.30	4,732.85	6,377.40	2,741.66	18,620.21	2,835.16+	6
1,500.00	43,557.63	13,991.00	------------	4,712.00	15,847.15	34,550.15	9,007.48+	7
216.58	6,007.42	309.40	1,643.30	1,098.62	1,590.95	4,642.27	1,365.15+	8
1,500.00	22,023.16	2,927.53	2,885.39	6,388.32	7,949.34	20,150.58	1,872.58+	9
398.89	2,288.39	569.84	122.50	150.00	754.64	1,596.98	691.41+	10
1,011.61	5,421.57	1,519.35	------------	922.00	1,993.64	4,434.99	986.58+	11
1,194.25	13,642.44	1,823.75	2,130.00	2,159.84	1,958.28	8,071.87	5,570.57+	12
624.05	7,307.76	891.50	513.00	1,703.00	2,300.34	5,407.84	1,899.92+	13
1,090.48	9,719.08	1,650.80	407.50	3,131.88	1,764.83	6,955.01	2,764.07+	14
1,500.00	10,214.17	2,377.25	2,418.84	2,794.25	2,562.63	10,152.97	61.20+	15
358.76	6,154.63	512.52	1,749.00	1,488.43	2,335.96	6,085.91	68.72+	16
1,500.00	19,611.90	3,150.55	4,120.00	2,412.50	3,459.36	13,142.41	6,469.49+	17
276.50	3,379.85	395.00	1,053.89	1,235.00	480.80	3,164.69	215.16+	18
1,146.83	10,723.84	1,744.72	2,006.00	1,890.00	1,837.12	7,477.84	3,246.00+	19
1,500.00	32,439.29	3,532.88	3,511.00	12,638.90	7,989.85	27,672.63	4,766.66+	20
319.34	869.34	456.20	------------	10.00	555.28	1,021.48	152.14—	21
1,500.00	26,167.42	2,572.75	3,225.00	3,596.00	2,996.30	12,390.05	13,777.37+	22
639.83	5,359.80	914.05	990.00	1,284.00	1,152.53	4,340.58	1,019.22+	23
848.89	3,854.44	1,248.15	50.00	950.00	816.15	3,064.30	790.14+	24
685.30	6,194.82	979.00	1,218.50	1,665.00	1,233.00	5,095.50	1,099.32+	25
1,464.22	17,257.27	2,273.70	2,292.84	1,966.40	4,738.92	11,271.86	5,985.41+	26
634.52	4,133.87	906.46	920.00	1,300.00	2,225.01	5,351.47	1,217.60—	27
969.25	2,873.00	1,448.75	------------	------------	637.44	2,086.19	786.81+	28
1,118.77	10,492.17	1,697.95	1,830.00	862.50	1,779.13	6,169.58	4,322.59+	29
1,178.95	10,526.94	1,798.25	845.00	3,657.00	1,839.22	8,139.47	2,387.47+	30
1,500.00	37,812.90	4,828.90	4,419.50	14,317.94	10,080.42	33,646.76	4,166.14+	31
480.51	5,630.30	686.45	2,036.00	2,642.94	1,272.76	6,638.15	1,007.85—	32
1,261.51	14,738.14	1,935.85	1,325.25	2,928.00	3,593.24	9,782.34	4,955.80+	33
771.88	4,463.91	1,119.80	------------	1,270.00	529.25	2,919.05	1,544.86+	34
1,046.80	11,013.86	1,578.00	505.30	2,340.28	2,315.35	6,738.93	4,274.93+	35
830.54	7,286.88	1,217.57	2,250.00	1,190.00	2,001.25	6,658.82	628.06+	36
1,019.36	5,485.75	1,532.27	705.50	1,175.00	2,010.16	5,422.93	62.82+	37
908.89	5,044.97	1,348.15	------------	1,410.00	1,260.22	4,018.37	1,026.60+	38
361.87	11,382.29	516.95	1,818.00	2,550.50	3,199.57	8,085.02	3,297.27+	39
785.20	7,840.25	1,142.00	2,315.50	2,348.66	2,341.51	8,147.67	307.42—	40
1,142.20	7,306.43	1,737.00	1,166.25	2,380.00	2,479.57	7,762.82	456.39—	41
709.60	3,353.05	1,016.00	1,032.50	1,326.00	386.27	3,760.77	407.72—	42
1,500.00	21,640.68	3,605.35	5,500.00	2,989.15	4,047.59	16,142.09	5,498.59+	43
1,268.41	9,633.51	1,947.35	1,852.25	3,320.00	1,358.52	8,478.12	1,155.39+	44
396.08	5,265.65	565.83	1,800.75	1,775.00	958.86	5,100.44	165.21+	45
855.66	9,125.33	1,259.44	1,885.25	1,350.00	2,247.39	6,742.08	2,383.25+	46
1,500.00	7,963.55	2,356.25	1,747.50	3,916.00	1,935.77	9,955.52	1,991.97—	47
1,282.48	7,415.53	1,970.80	1,960.00	1,920.00	1,741.06	7,591.86	176.33—	48
920.94	11,975.69	1,368.24	1,092.25	3,291.37	2,458.84	8,210.70	3,764.99+	49
847.60	6,502.95	1,246.00	1,733.00	1,867.00	1,223.30	6,069.30	433.65+	50
703.30	2,135.50	1,005.50	605.00	1,067.50	554.93	3,232.93	1,097.43—	51
1,500.00	14,179.17	2,533.90	2,003.76	3,790.00	3,628.97	11,956.63	2,222.54+	52
512.93	4,510.15	732.75	326.00	1,792.08	925.30	3,776.13	734.02+	53
685.82	3,175.02	979.75	676.00	580.50	917.15	3,153.40	21.62+	54
1,137.57	10,500.17	1,729.28	425.00	4,475.00	3,164.90	9,794.18	705.99+	55
1,500.00	9,034.53	2,587.00	2,606.00	1,455.00	1,669.80	8,317.80	716.73+	56
1,249.93	12,919.07	1,916.55	3,300.00	3,032.64	2,722.61	10,971.80	1,947.27+	57
558.74	1,827.51	798.20	------------	379.30	488.84	1,666.34	161.17+	58
1,391.95	17,280.25	2,153.25	3,065.00	2,898.00	4,828.38	12,944.63	4,335.62+	59
870.44	4,969.20	1,284.08	1,073.90	2,439.43	1,143.20	5,940.61	971.41—	60
1,500.00	33,698.57	6,920.05	5,275.00	6,431.50	9,384.36	28,010.91	5,687.66+	61
1,500.00	16,482.55	3,057.60	3,917.50	2,764.20	5,457.50	15,196.80	1,285.75+	62
756.73	5,113.63	1,094.55	1,150.00	2,300.00	1,455.97	6,000.52	886.89—	63
1,500.00	21,814.24	4,627.55	3,520.00	2,660.00	7,451.58	18,259.13	3,555.11+	64

TABLE NO.

Number	County, City or Town	Receipts					
		Ticket Sales		Entry fees speed department	Concessions and privileges	Advertising in premium list and program	Miscellaneous receipts of fair
		Outside gate	Grand stand				
65	Mills, Malvern	7,016.28	1,600.00	792.00	1,432.50	----------	346.42
66	Mitchell, Osage	4,881.50	717.75	350.00	583.63	281.00	255.50
67	Monona, Onawa	2,222.10	578.80	160.00	247.50	292.00	----------
68	Monroe, Albia	3,709.95	644.52	543.32	621.00	351.50	777.21
69	Muscatine, West Liberty	11,312.25	2,165.50	742.00	1,402.00	204.00	2,435.73
70	O'Brien, Sheldon	8,182.25	781.25	610.00	1,506.93	15.00	1,263.17
71	O'Brien, Sutherland	4,293.77	321.11	----------	155.00	----------	478.50
72	Page, Clarinda	6,672.00	1,676.35	----------	1,487.15	859.00	735.98
73	Page, Shenandoah	7,428.20	695.50	----------	1,034.50	329.00	2,025.81
74	Pocahontas, Fonda	3,573.75	284.60	467.00	1,500.00	170.00	562.00
75	Pottawattamie, Avoca	4,472.20	779.50	610.00	599.00	----------	1,186.60
76	Poweshiek, Grinnell	4,367.93	1,538.25	750.00	1,230.25	471.75	533.10
77	Poweshiek, Malcom	1,118.25	266.00	324.00	152.50	364.00	113.40
78	Sac, Sac City	4,754.75	975.00	570.00	1,554.50	----------	894.57
79	Shelby, Harlan	6,162.59	3,104.25	----------	2,045.86	1,020.00	1,415.71
80	Sioux, Orange City	2,719.18	320.65	427.50	851.65	414.00	497.50
81	Story, Ames	3,226.60	----------	----------	551.00	----------	1,547.00
82	Tama, Toledo	3,568.75	490.60	505.00	657.00	----------	1,216.37
83	Taylor, Bedford	6,490.95	366.85	----------	1,308.00	44.95	696.50
84	Van Buren, Milton	2,486.50	----------	----------	100.50	85.00	353.00
85	Wapello, Ottumwa	553.60	----------	----------	55.00	----------	353.80
86	Warren, Indianola	4,299.25	1,357.50	41.25	344.00	302.50	325.27
87	Wayne, Corydon	10,848.25	5,491.50	770.00	1,597.15	219.00	214.00
88	Webster, Fort Dodge	9,721.49	6,474.65	970.00	3,875.45	75.00	270.00
89	Winnebago, Forest City	3,655.15	847.50	354.50	886.50	1,172.50	540.28
90	Winneshiek, Decorah	7,852.88	526.30	----------	1,620.08	408.00	59.50
91	Woodbury, Sioux City	47,545.25	13,263.50	1,819.90	19,498.00	2,751.00	4,034.67
92	Worth, Northwood	1,740.15	127.85	----------	230.00	----------	263.75
93	Wright, Clarion	3,971.25	516.50	365.00	423.00	----------	674.86
94	Totals 1919	$ 567,273.53	$ 143,263.06	$28,599.29	$ 111,695.16	$24,865.20	$88,885.40
95	Totals 1918	$ 382,947.45	$ 74,666.01	$42,755.30	$ 64,419.02	----------	$73,532.88
96	Totals 1917	$ 435,182.48	$ 87,948.12	$45,179.93	$ 80,282.03	----------	$59,797.89
97	Totals 1916	$ 382,555.23	$ 77,470.19	$47,204.11	$ 71,984.26	----------	$67,259.95
98	Totals 1915	$ 308,720.82	$ 56,650.00	$37,242.95	$ 58,592.11	----------	$55,643.78

1—Continued.

Receipts		Disbursements					(+) Profit (—) Loss	Number
State aid	Total receipts of fair	Premiums other than for speed	Speed premiums	Music and attractions	Miscellaneous expense of fair	Total expense of fair		
776.17	11,963.37	1,126.95	3,129.50	3,343.82	3,369.85	10,970.12	993.25+	65
769.48	7,838.86	1,115.80	2,333.38	1,589.10	1,294.12	6,332.40	1,506.46+	66
494.90	3,995.30	707.00	985.25	1,022.00	586.80	3,301.05	694.25+	67
880.30	7,527.80	1,300.50	2,400.00	1,214.00	2,082.41	6,996.91	560.89+	68
1,500.00	19,761.48	3,427.75	3,380.00	3,008.80	3,552.37	13,368.92	6,392.56+	69
939.43	13,298.03	1,399.05	2,858.00	2,391.96	2,748.78	9,397.79	3,900.24+	70
494.90	5,743.28	707.00	------------	3,657.11	933.51	5,297.62	445.66+	71
853.81	12,284.29	1,256.35	2,151.50	4,240.19	4,029.34	11,677.38	606.91+	72
1,004.65	12,517.66	1,507.75	1,650.00	3,790.67	3,238.53	10,186.95	2,330.71+	73
281.92	6,839.27	402.75	2,122.00	1,480.00	1,808.67	5,813.42	1,025.85+	74
982.33	8,629.63	1,470.55	2,645.00	1,661.00	993.45	6,770.00	1,859.63+	75
1,019.80	9,911.08	1,533.00	2,282.50	2,690.80	2,609.94	9,116.24	794.84+	76
386.57	2,724.72	552.25	1,484.00	820.00	1,118.50	3,974.75	1,250.03—	77
667.12	9,415.94	953.03	3,087.35	2,398.15	3,152.16	9,580.69	164.75—	78
1,160.11	14,908.52	1,766.85	2,946.22	3,617.80	2,523.50	10,854.37	4,054.15+	79
546.35	5,776.83	780.50	2,070.00	1,475.00	1,669.78	5,995.28	218.45—	80
1,104.10	6,428.70	1,673.50	309.00	1,694.00	1,162.21	4,838.71	1,589.99+	81
1,391.05	7,828.77	2,151.75	1,705.00	2,500.00	3,022.02	9,378.77	1,550.00—	82
317.55	9,224.80	453.65	1,975.00	2,724.00	1,185.92	6,338.57	2,886.23+	83
1,172.95	4,197.95	1,788.25	920.00	875.00	886.00	4,469.25	271.30—	84
1,161.16	2,123.56	1,768.60	------------	1,026.00	505.99	3,300.59	1,177.03—	85
1,500.00	8,169.77	2,619.75	2,076.23	2,391.80	3,018.11	10,105.89	1,936.12—	86
1,500.00	20,639.90	2,492.00	5,091.00	3,089.55	4,188.30	14,860.85	5,779.05+	87
1,500.00	22,886.59	2,563.90	3,687.00	10,841.17	5,744.17	22,836.24	50.35+	88
607.07	8,063.50	867.25	1,896.52	1,832.00	1,660.75	6,256.52	1,806.98+	89
616.00	11,082.76	880.00	1,015.00	2,876.02	2,776.75	7,547.77	3,534.99+	90
1,500.00	90,412.32	8,529.95	7,778.95	14,375.60	32,185.79	62,870.29	27,542.03+	91
540.96	2,902.71	772.80	------------	846.00	632.29	2,251.09	651.62+	92
989.68	6,940.29	1,482.80	1,980.00	2,109.00	904.09	6,475.89	464.40+	93
$ 90,508.50	$ 1,055,089.14	$ 174,633.07	$ 176,905.35	$ 252,546.57	$ 269,183.01	$ 873,268.00	$ 199,680.55+ 17,859.41—	94
$ 51,048.36	$ 689,469.02	$ 129,306.75	$ 146,034.34	$ 161,763.18	$ 214,838.45	$ 651,942.72	$ 65,493.09+ 27,966.79—	95
$ 54,817.24	$ 763,207.69	$ 137,226.48	$ 148,359.47	$ 159,441.51	$ 206,611.35	$ 651,638.81	$ 122,791.34+ 11,222.46—	96
$ 56,870.67	$ 703,344.41	$ 144,703.25	$ 149,285.42	$ 151,242.79	$ 181,638.68	$ 626,870.14	$ 93,132.24+ 16,657.97—	97
$ 48,085.98	$ 564,935.64	$ 117,439.10	$ 127,951.22	$ 115,227.34	$ 160,982.24	$ 521,599.90	$ 62,230.80+ 18,895.06—	98

TABLE NO. 2—FINANCIAL STATEMENT OF COUNTY

Number	County and City or Town	Balance on hand	Receipts			
			Receipts of fair	Receipts from sources other than fair	Total receipts	Expense of fair
1	Adair, Greenfield	$ 171.41	$ 6,917.97		$ 7,089.3	$ 6,746.70
2	Adams, Corning	50.81	6,867.80		6,918.61	6,089.11
3	Allamakee, Waukon	688.58	4,281.99		4,970.5	4,700.36
4	Audubon, Audubon	709.72	11,068.77	$ 1,600.00	13,378.49	8,485.49
5	Benton, Vinton	184.13	11,719.43	12,565.54	24,469.1	13,919.64
6	Black Hawk, Cedar Falls	2,704.96	21,455.37	10,023.94	34,184.27	18,620.21
7	Black Hawk, Waterloo	3,871.74	43,557.63	42,575.00	90,004.37	34,550.15
8	Boone, Ogden	206.31	6,007.42	20.00	6,233.73	4,642.27
9	Bremer, Waverly	307.96	22,023.16	400.00	22,731.12	20,150.58
10	Buchanan, Aurora	441.71	2,288.39	2.50	2,732.60	1,596.98
11	Buchanan, Jesup	1,240.00	5,421.57	590 00	7,251.57	4,434.99
12	Buena Vista, Alta	6.05	13,642.44		13,648.49	8,071.87
13	Butler, Allison	132.40	7,307.76	200.00	7,640.16	5,407.84
14	Calhoun, Manson	217.00	9,719.08		9,936.08	6,955.01
15	Calhoun, Rockwell City	529.57	10,214.17	1,225.00	11,968.74	10,152.97
16	Carroll, Carroll		6,154.63	174.28	6,328.91	6,085.91
17	Cass, Atlantic	241.63	19,611.90		19,853.53	13,142.41
18	Cass, Massena	500.59	3,379.85	10.00	3,890.44	3,164.69
19	Cedar, Tipton	93.58	10,723.84		10,817.42	7,477.84
20	Cerro Gordo, Mason City		32,439.29	5,698.25	38,137.64	27,672.63
21	Clarke, Osceola		869.34		869.34	1,021.48
22	Clay, Spencer		26,167.42		26,167.42	12,390.05
23	Clayton, Elkader		5,359.80	8,595.00	13,954.80	4,340.58
24	Clayton, National	3.39	3,854.44		3,857.83	3,064.30
25	Clayton, Strawberry Point	165.91	6,194.82	2,500.00	8,860.73	5,095.50
26	Clinton, DeWitt	952.57	17,257.27	330.00	18,539.84	11,271.86
27	Crawford, Arion	18.00	4,133.87	1,200.00	5,351.87	5,351.47
28	Dallas, Waukee		2,873.00	334.00	3,207.00	2,086.19
29	Davis, Bloomfield	52.85	10,492.17		10,545.02	6,169.58
30	Delaware, Manchester	2,095.71	10,526.94	3,747.00	16,369.65	8,139.47
31	Des Moines, Burlington		37,812.90	1,016.15	38,829.05	33,646.76
32	Dickinson, Spirit Lake		5,630.30	2,862.14	8,492.44	6,638.15
33	Fayette, West Union	5,100.11	14,738.14	393.07	20,231.32	9,782.34
34	Fremont, Hamburg		4,463.91		4,463.91	2,919.05
35	Greene, Jefferson	3,035.11	11,013.86	207.52	14,256.49	6,738.93
36	Grundy, Grundy Center		7,286.88	175.00	7,461.88	6,658.82
37	Guthrie, Guthrie Center	174.95	5,485.75		5,660.70	5,422.93
38	Hamilton, Webster City	63.23	5,044.97	500.00	5,608.20	4,018.37
39	Hancock, Britt	427.30	11,382.29		11,809.59	8,085.02
40	Hardin, Eldora		7,840.25	350.00	8,190.25	8,147.67
41	Harrison, Missouri Valley	1,465.97	7,306.43		8,772.40	7,762.82
42	Henry, Winfield	7.32	3,353.05	400.40	3,760.77	3,760.77
43	Henry, Mt. Pleasant	248.30	21,640.68	1,049.76	22,938.74	16,142.09
44	Humboldt, Humboldt	150.00	9,633.51	3,650.00	13,433.51	8,478.12
45	Iowa, Williamsburg	177.56	5,265.65		5,443.21	5,100.44
46	Jackson, Maquoketa	75.33	9,125.33	590.00	9,790.66	6,742.08
47	Jasper, Newton	603.26	7,963.55	3,500.00	12,066.81	9,955.52
48	Jefferson, Fairfield		7,415.53	13,380.00	20,795.53	7,591.86
49	Jones, Anamosa		6,502.95	7,635.00	14,137.95	6,069.30
50	Jones, Monticello		11,975.69		11,975.69	8,210.70
51	Keokuk, What Cheer	3,439.05	2,135.50	3,700.00	9,274.55	3,232.93
52	Kossuth, Algona	185.28	14,179.17	4,000.00	18,364.45	11,956.63
53	Lee, Donnellson	8.50	4,510.15		4,518.65	3,776.13
54	Lee, West Point	150.54	3,175.02	236.00	3,561.56	3,153.40
55	Linn, Central City	214.93	10,500.17	675.00	11,390.10	9,794.18
56	Linn, Marion		9,034.53	500.00	9,534.53	8,317.80
57	Louisa, Columbus Junc.	51.97	12,919.07	1,416.35	14,387.39	10,971.80
58	Lucas, Derby	119.67	1,827.51	1,550.00	3,497.18	1,666.34
59	Lyon, Rock Rapids	3,041.81	17,280.25		20,322.06	12,944.63
60	Mahaska, New Sharon	457.40	4,969.20	3,611.30	9,037.90	5,940.61
61	Mahaska, Oskaloosa	1,463.74	33,698.57	27,950.00	63,112.31	28,010.91
62	Marion, Knoxville		16,482.55		16,482.55	15,196.80
63	Marion, Pella		5,113.63	1,775.00	6,888.63	6,000.52
64	Marshall, Marshalltown	13 46	21,814.24	300.00	22,127.70	18,259.13

AND DISTRICT FAIRS RECEIVING STATE AID IN 1919.

Disbursements			Balance or Overdraft		Assets and Liabilities		
Indebtedness of previous years paid	Improvements and repairs, 1919	Total disbursements	Balance, Nov. 1, 1919	Overdraft, Nov. 1, 1919	Value of grounds and buildings	Present indebtedness	Number
----------	$ 209.90	$ 6,956.60	$ 132.78	----------	$ 12,000.00	$ 1,000.00	1
$ 140.00	284.02	6,513.13	405.48	----------	10,000.00	400.00	2
----------	778.30	5,478.66	----------	$ 508.09	8,000.00	----------	3
508.80	4,532.33	13,526.62	----------	148.13	15,000.00	1,000.00	4
----------	10,108.99	24,028.63	440.47	----------	25,000.00	16,900.00	5
----------	10,628.82	29,249.03	4,935.24	----------	75,000.00	41,000.00	6
5,500.00	46,059.40	86,109.55	3,894.82	----------	130,000.00	52,000.00	7
----------	628.42	5,270.69	963.04	----------	25,000.00	8,700.00	8
706.00	578.90	21,435.48	1,295.64	----------	25,000.00	5,700.00	9
----------	468.08	2,065.06	667.54	----------	----------	----------	10
----------	300.00	4,734.99	2,516.58	----------	125,000.00	----------	11
----------	3,435.30	11,507.17	2,141.32	----------	22,000.00	1,500.00	12
161.05	----------	5,568.89	2,071.27	----------	10,000.00	----------	13
----------	992.10	7,947.11	1,988.97	----------	14,550.00	----------	14
----------	528.10	10,681.07	1,287.67	----------	25,000.00	3,600.00	15
----------	243.00	6,328.91	----------	----------	18,000.00	5,250.00	16
2,750.00	4,683.94	20,576.35	----------	722.82	50,000.00	----------	17
----------	394.87	3,559.56	330.88	----------	10,000.00	----------	18
----------	2,413.36	9,891.20	926.22	----------	18,000.00	----------	19
----------	8,492.94	36,165.57	1,972.07	----------	43,000.00	3,573.06	20
----------	----------	1,021.48	----------	152.14	----------	----------	21
5,078.00	1,017.68	18,485.73	7,681.69	----------	90,000.00	3,400.00	22
6,853.58	1,203.62	12,397.78	1,557.02	----------	15,000.00	----------	23
357.68	57.50	3,479.48	378.35	----------	6,000.00	3,000.00	24
1,788.15	3,000.00	9,883.65	----------	1,022.92	10,000.00	5,200.00	25
1,306.55	2,090.58	14,668.99	3,870.85	----------	11,000.00	----------	26
----------	----------	5,351.47	.40	----------	3,000.00	1,040.00	27
----------	----------	2,086.19	1,120.81	----------	----------	300.00	28
1,696.78	780.00	8,646.36	1,898.66	----------	22,000.00	----------	29
1,879.17	5,296.58	15,315.22	1,054.43	----------	30,000.00	2,600.00	30
4,305.96	----------	37,952.72	876.33	----------	90,000.00	40,000.00	31
417.60	2,401.44	9,457.19	----------	964.75	13,400.00	5,825.08	32
----------	3,313.53	13,095.87	7,135.45	----------	25,000.00	----------	33
----------	2,379.90	5,298.95	----------	835.04	7,000.00	7,000.00	34
----------	2,245.88	8,984.81	5,271.68	----------	25,000.00	5,000.00	35
----------	1,322.00	7,980.82	----------	518.94	15,000.00	1,150.00	36
248.00	660.89	6,331.82	----------	671.12	18,000.00	800.00	37
----------	----------	4,018.37	1,589.83	----------	40,000.00	----------	38
3,261.36	----------	11,346.38	463.21	----------	12,000.00	2,500.00	39
----------	392.87	8,540.54	----------	350.29	20,000.00	3,350.00	40
159.94	804.36	8,727.12	45.28	----------	15,000.00	----------	41
----------	----------	3,760.77	----------	----------	20,000.00	5,626.00	42
3,821.25	1,128.00	21,091.34	1,847.40	----------	40,000.00	3,000.00	43
3,650.00	500.00	12,428.12	1,005.39	----------	40,000.00	10,000.00	44
----------	96.16	5,196.60	246.61	----------	12,000.00	4,600.00	45
180.00	1,698.85	8,620.93	1,169.73	----------	16,000.00	3,500.00	46
----------	2,003.75	11,959.27	107.54	----------	70,000.00	5,000.00	47
800.00	12,043.32	20,435.18	260.35	----------	20,000.00	12,000.00	48
1,218.94	6,108.55	13,396.79	741.16	----------	25,000.00	8,185.57	49
297.54	2,476.12	10,984.36	991.33	----------	24,500.00	----------	50
----------	5,393.35	8,626.28	648.27	----------	16,000.00	3,700.00	51
2,752.44	2,880.55	17,589.62	774.83	----------	50,000.00	3,200.00	52
50.00	59.08	3,885.21	633.44	----------	3,000.00	1,130.71	53
----------	387.88	3,541.28	20.28	----------	8,800.00	5,730.00	54
----------	1,595.92	11,390.10	----------	----------	10,000.00	1,700.00	55
----------	500.00	8,817.80	716.73	----------	16,000.00	7,500.00	56
2,357.20	777.90	14,106.90	280.49	----------	18,000.00	3,000.00	57
1,574.88	250.00	3,491.22	5.96	----------	8,000.00	2,400.00	58
----------	944.31	13,888.94	6,433.12	----------	60,000.00	----------	59
2,339.83	50.52	8,330.96	706.94	----------	15,000.00	1,400.00	60
----------	12,668.87	40,679.78	22,432.53	----------	125,000.00	28,800.00	61
1,347.30	160.00	16,704.10	----------	221.55	50,400.00	27,100.00	62
498.84	----------	6,499.36	389.27	----------	12,000.00	4,350.00	63
1,500.00	684.00	20,443.13	1,684.57	----------	45,000.00	----------	64

TABLE NO. 2

Number	County and City or Town	Balance on hand	Receipts			
			Receipts of fair	Receipts from sources other than fair	Total receipts	Expense of fair
65	Mills, Malvern	410.96	11,963.37	603.60	12,977.93	10,970.12
66	Mitchell, Osage	92.06	7,838.86	10.00	7,940.92	6,332.40
67	Monona, Onawa	197.18	3,995.30	338.52	4,531.00	3,301.05
68	Monroe, Albia	1,293.68	7,527.80	90.00	8,911.48	6,996.91
69	Muscatine, West Liberty	3,399.77	19,761.48	-----------	23,161.25	13,368.92
70	O'Brien, Sheldon	44.00	13,298.03	3,250.00	16,592.03	9,397.79
71	O'Brien, Sutherland	166.79	5,743.28	350.00	6,260.07	5,297.62
72	Page, Clarinda	721.28	12,284.29	850.00	13,855.57	11,677.38
73	Page, Shenandoah	560.89	12,517.66	4,160.27	17,238.82	10,186.95
74	Pocahontas, Fonda	681.27	6,839.27	-----------	7,520.54	5,813.42
75	Pottawattamie, Avoca	20.79	8,629.63	867.60	9,518.02	6,770.00
76	Poweshiek, Grinnell	----------	9,911.08	1,200.00	11,111.08	9,116.24
77	Poweshiek, Malcom	18.25	2,724.72	1,500.00	4,242.97	3,974.75
78	Sac, Sac City	60.88	9,415.94	1,600.00	11,076.82	9,580.69
79	Shelby, Harlan	1,674.90	14,908.52	-----------	16,583.42	10,854.37
80	Sioux, Orange City	770.32	5,776.83	5,667.50	12,214.65	5,995.28
81	Story, Ames	319.18	6,428.70	-----------	6,747.88	4,838.71
82	Tama, Toledo	----------	7,828.77	1,750.00	9,578.77	9,378.77
83	Taylor, Bedford	2,348.18	9,224.80	-----------	11,572.98	6,338.57
84	Van Buren, Milton	----------	4,197.95	-----------	4,197.95	4,469.25
85	Wapello, Ottumwa	890.16	2,123.56	1,266.00	4,279.72	3,300.59
86	Warren, Indianola	1.67	8,169.77	29,034.45	37,205.89	10,105.89
87	Wayne, Corydon	12.77	20,639.90	2,608.87	23,261.54	14,860.85
88	Webster, Fort Dodge	----------	22,886.59	1,000.00	23,886.59	22,836.24
89	Winnebago, Forest City	----------	8,063.50	-----------	8,063.50	6,256.52
90	Winneshiek, Decorah	21.68	11,082.76	-----------	11,104.44	7,547.77
91	Woodbury, Sioux City	14,418.63	90,412.32	1,098.67	105,929.62	62,870.29
92	Worth, Northwood	758.30	2,902.71	-----------	3,661.01	2,251.09
93	Wright, Clarion	----------	6,940.29	48.88	6,989.17	6,475.89
94	Totals 1919	$65,144.96	$ 1,055,089.14	$ 230,507.56	$ 1,350,741.66	$ 873,268.00
95	Totals 1918	$73,010.80	$ 689,469.02	$ 112,233.60	$ 874,713.42	$ 651,942.72
96	Totals 1917	$51,620.20	$ 763,207.69	$ 182,706.77	$ 942,717.42	$ 651,638.81
97	Totals 1916	$48,355.73	$ 703,344.41	$ 194,738.86	$ 889,568.33	$ 626,870.14
98	Totals 1915	$36,480.71	$ 564,935.64	$ 188,684.12	$ 742,014.00	$ 521,599.90

—Continued.

Disbursements			Balance or Overdraft		Assets and Liabilities		
Indebtedness of previous years paid	Improvements and repairs, 1919	Total disbursements	Balance, Nov. 1, 1919	Overdraft, Nov. 1, 1919	Value of grounds and buildings	Present indebtedness	Number
1,077.77	------------	12,047.89	930.04	------------	20,000.00	10,000.00	65
1,509.22	40.95	7,882.57	58.35	------------	15,000.00	1,500.00	66
237.00	497.98	4,036.03	494.97	------------	15,000.00	4,000.00	67
------------	880.00	7,876.91	1,034.57	------------	7,500.00	------------	68
------------	3,171.23	16,540.15	6,621.10	------------	16,000.00	------------	69
2,130.29	4,383.19	15,911.27	680.76	------------	25,000.00	2,000.00	70
------------	748.99	6,046.61	213.46	------------	14,000.00	1,500.00	71
1,036.24	473.15	13,186.77	668.80	------------	7,619.95	------------	72
4,777.34	406.74	15,371.03	1,867.79	------------	18,000.00	4,376.63	73
------------	------------	5,813.42	1,707.12	------------	12,000.00	------------	74
------------	1,217.43	7,987.83	1,530.19	------------	20,000.00	1,000.00	75
1,338.40	360.06	10,814.70	296.38	------------	21,000.00	9,150.00	76
------------	------------	3,974.75	268.22	------------	10,000.00	3,650.00	77
------------	689.24	10,269.93	806.39	------------	27,000.00	8,900.00	78
------------	1,096.90	11,951.27	4,632.15	------------	36,000.00	------------	79
------------	4,343.09	10,338.37	1,876.28	------------	33,000.00	7,500.00	80
398.57	1,251.21	6,488.49	259.39	------------	6,000.00	3,500.00	81
------------	200.00	9,578.77	------------	------------	25,000.00	12,000.00	82
------------	1,276.61	7,615.18	3,957.80	------------	12,000.00	------------	83
------------	50.00	4,519.25	------------	321.30	8,000.00	4,250.00	84
------------	410.00	3,710.59	569.13	------------	------------	------------	85
------------	27,100.00	37,205.89	------------	------------	30,000.00	------------	86
3,283.15	1,410.17	19,554.17	3,707.37	------------	25,000.00	5,400.00	87
------------	------------	22,836.24	1,050.35	------------	200,000.00	------------	88
------------	716.49	6,973.01	1,090.49	------------	15,000.00	5,700.00	89
3,048.00	239.96	10,835.73	268.71	------------	17,500.00	3,000.00	90
------------	10,305.61	73,175.90	32,753.72	------------	200,000.00	------------	91
------------	------------	2,251.09	1,409.92	------------	7,000.00	------------	92
174.50	330.00	6,980.39	8.78	------------	20,000.00	9,100.00	93
$ 78,517.22	$ 236,534.13	$ 1,188,319.35	$ 168,859.40	$ 6,437.09	$ 2,707,269.95	$ 459,163.99	94
$ 36,761.22	$ 121,950.89	$ 810,654.83	$ 83,904.16	$ 19,845.57	$ 1,906,203.86	$ 326,280.74	95
$ 85,592.90	$ 96,464.95	$ 833,696.66	$ 114,718.13	$ 5,697.37	$ 1,629,082.99	$ 320,743.84	96
$ 71,687.90	$ 138,269.99	$ 836,828.03	$ 74,341.91	$ 21,601.61	$ 1,588,885.00	$ 261,155.40	97
$ 39,156.93	$ 102,102.92	$ 688,291.21	$ 63,491.98	$ 9,769.19	$ 988,128.44	$ 267,299.26	98

TABLE NO. 3—TOTAL NUMBER OF EXHIBITORS, NUMBER EXHIBITORS IN AND POULTRY ON EXHIBITION AND

Number	County and City or Town	Number of exhibitors	Number of exhibitors live stock department	Horses		Cattle		Swine	
				No. exhibited	Premiums paid	No. exhibited	Premiums paid	No. exhibited	Premiums paid
1	Adair, Greenfield	189	44	33	$ 231.50	49	$ 240.75	98	$ 259.50
2	Adams, Corning	55	26	5	3.00	21	87.00	57	153.50
3	Allamakee, Waukon	272	82	43	156.00	35	147.00	66	147.00
4	Audubon, Audubon	300	45	72	278.50	82	473.00	432	212.00
5	Benton, Vinton	182	72	97	945.00	178	1,340.00	321	536.00
6	Black Hawk, Cedar Falls	523	221	80	420.00	389	2,118.00	315	329.00
7	Black Hawk, Waterloo	494	83	279	5,260.00	478	8,081.00	------	----------
8	Boone, Ogden	65	3	14	105.00	8	28.00	------	----------
9	Bremer, Waverly	889	68	46	547.15	132	806.75	265	512.50
10	Buchanan, Aurora	100	48	54	63.75	21	76.00	80	106.00
11	Buchanan, Jesup	174	101	75	146.00	221	868.00	235	235.00
12	Buena Vista, Alta	106	49	36	158.50	38	268.50	348	1,016.50
13	Butler, Allison	510	25	19	103.50	64	172.00	94	150.00
14	Calhoun, Manson	189	21	56	295.50	65	298.50	270	282.00
15	Calhoun, Rockwell City	103	23	50	342.00	73	690.00	108	533.00
16	Carroll, Carroll	62	21	2	8.00	19	341.24	28	40.00
17	Cass, Atlantic	315	205	86	404.50	42	332.00	1,024	1,514.50
18	Cass, Massena	56	20	5	54.00	15	104.00	57	110.00
19	Cedar, Tipton	239	46	65	454.50	40	458.00	160	202.50
20	Cerro Gordo, Mason City	783	71	65	483.00	66	692.00	350	821.25
21	Clarke, Osceola	116	39	16	66.00	10	84.00	10	73.00
22	Clay, Spencer	472	100	50	272.00	158	648.00	1,000	887.00
23	Clayton, Elkader	148	25	10	46.00	28	131.25	121	253.50
24	Clayton, National	84	28	58	211.50	88	329.00	101	162.00
25	Clayton, Strawberry Point	197	37	18	125.00	57	231.50	43	209.00
26	Clinton, DeWitt	682	42	12	102.00	81	474.00	550	637.00
27	Crawford, Arion	159	53	13	72.00	29	163.50	251	198.50
28	Dallas, Waukee	121	65	116	554.75	52	341.25	148	453.00
29	Davis, Bloomfield	197	66	48	582.00	33	202.00	128	275.50
30	Delaware, Manchester	356	210	56	361.00	212	786.00	240	324.00
31	Des Moines, Burlington	477	42	57	497.00	97	1,286.00	197	994.50
32	Dickinson, Spirit Lake	205	34	------	----------	17	66.50	98	185.50
33	Fayette, West Union	358	138	137	439.25	186	616.00	174	271.00
34	Fremont, Hamburg	251	62	86	182.00	73	268.00	115	168.50
35	Greene, Jefferson	267	65	39	178.00	30	135.00	264	659.00
36	Grundy, Grundy Center	85	40	40	209.00	60	328.00	150	247.50
37	Guthrie, Guthrie Center	133	61	46	119.50	76	233.00	250	559.00
38	Hamilton, Webster City	235	109	45	190.00	90	276.50	400	426.50
39	Hancock, Britt	70	25	14	54.00	34	96.50	113	155.00
40	Hardin, Eldora	133	59	32	107.00	52	305.00	178	120.00
41	Harrison, Missouri Valley	219	38	41	221.00	53	362.00	175	656.00
42	Henry, Winfield	69	29	53	316.00	30	281.00	28	80.00
43	Henry, Mt. Pleasant	414	73	81	720.00	102	995.00	330	640.00
44	Humboldt, Humboldt	135	40	38	429.00	28	167.50	204	463.00
45	Iowa, Williamsburg	130	44	6	63.00	------	----------	166	167.40
46	Jackson, Maquoketa	1,000	607	32	170.00	150	467.00	350	163.00
47	Jasper, Newton	139	25	28	237.00	32	197.50	216	460.25
48	Jefferson, Fairfield	160	45	67	382.00	64	505.50	125	451.00
49	Jones, Anamosa	183	49	57	328.00	38	286.00	88	297.00
50	Jones, Monticello	240	19	30	167.00	55	529.00	59	175.00
51	Keokuk, What Cheer	91	28	7	45.00	65	357.50	98	266.00
52	Kossuth, Algona	392	52	49	301.50	102	459.00	308	680.50
53	Lee, Donnellson	80	18	26	180.00	12	96.00	49	96.00
54	Lee, West Point	49	21	18	101.00	32	298.00	19	184.00
55	Linn, Central City	171	54	57	277.20	108	684.28	142	452.80
56	Linn, Marion	216	84	45	231.00	115	983.00	102	355.00
57	Louisa, Columbus Junction	143	40	40	264.50	68	498.00	189	625.00
58	Lucas, Derby	198	58	57	135.00	47	192.50	48	90.50
59	Lyon, Rock Rapids	203	54	55	426.00	98	642.50	182	446.00
60	Mahaska, New Sharon	206	55	92	393.30	62	208.80	86	159.30
61	Mahaska, Oskaloosa	906	173	150	1,134.00	234	2,107.00	385	1,811.00
62	Marion, Knoxville	1,050	175	60	436.00	62	499.00	186	703.00
63	Marion, Pella	179	23	61	389.00	7	68.00	35	152.00
64	Marshall, Marshalltown	1,200	126	104	520.00	170	1,198.00	709	984.00

LIVE STOCK DEPARTMENT, NUMBER HORSES, CATTLE, SWINE, SHEEP AMOUNT OF PREMIUMS PAID IN EACH DIVISION.

Sheep		Poultry		Premiums Paid						
No. exhibited	Premiums paid	No. exhibited	Premiums paid	Agricultural products	Fruits, plants and flowers	Culinary products	Fine arts department	School exhibit, boys' and girls' department	All other departments	Number
18	$ 50.00	160	$ 80.00	$ 126.25	$ 42.45	$ 83.25	$ 156.25	$ 75.00	$ 186.50	1
29	92.00	487	64.75	51.55	6.50	55.75	63.70	----------	----------	2
11	27.00	257	120.30	11.25	7.00	31.25	51.00	----------	116.50	3
--------	----------	116	26.00	77.85	48.45	58.50	159.15	24.25	64.50	4
53	98.00	161	59.50	101.00	28.50	7.75	59.50	160.75	----------	5
129	276.50	164	135.00	170.00	69.00	59.80	183.50	982.00	25.50	6
--------	----------	--------	----------	----------	----------	----------	----------	150.00	500.00	7
4	14.00	56	23.25	7.00	33.00	12.90	80.85	5.40	----------	8
48	95.00	154	66.85	178.85	44.45	100.75	188.80	331.43	55.00	9
11	8.00	93	96.54	76.25	44.50	24.75	42.75	15.30	16.00	10
32	39.00	240	98.50	44.50	3.75	22.25	55.85	6.50	----------	11
--------	----------	50	28.25	22.75	20.50	56.25	85.50	167.00	----------	12
15	37.50	140	71.00	66.55	20.20	49.00	86.75	135.00	----------	13
--------	----------	193	69.00	88.10	152.10	123.90	208.10	133.60	----------	14
56	65.00	332	352.00	86.00	33.50	102.25	130.75	42.75	----------	15
--------	----------	14	19.52	13.50	----------	----------	42.00	42.50	5.78	16
87	140.50	502	148.00	139.00	74.50	114.75	217.80	65.00	----------	17
18	59.00	27	9.00	17.50	12.25	6.75	22.50	----------	----------	18
48	105.00	172	72.95	88.00	45.20	67.00	124.10	82.47	45.00	19
100	480.00	71	57.00	122.50	46.50	116.20	236.30	451.88	26.25	20
3	69.00	--------	----------	51.75	4.75	21.00	68.20	10.00	8.50	21
50	107.00	184	103.25	248.50	18.25	54.45	131.90	102.40	----------	22
20	60.00	46	35.00	39.70	37.05	108.75	160.80	39.00	----------	23
38	63.50	37	12.00	59.50	54.60	120.05	135.25	25.75	75.00	24
7	32.50	49	44.50	50.00	31.25	86.25	127.25	41.75	----------	25
22	51.00	44	33.00	129.00	147.50	119.00	321.00	250.70	9.50	26
22	39.00	69	17.75	99.00	78.75	61.85	27.20	148.91	----------	27
6	15.00	63	30.25	18.50	1.00	18.75	15.50	----------	.75	28
87	191.50	197	70.20	76.00	42.50	21.00	127.25	86.00	24.00	29
16	37.50	58	18.00	94.00	157.00	----------	----------	20.75	----------	30
101	425.25	634	320.84	477.75	----------	137.75	512.81	177.00	----------	31
28	44.00	--------	----------	175.50	71.75	17.50	19.25	106.45	----------	32
31	68.00	300	106.00	179.85	72.25	37.00	130.00	16.50	----------	33
--------	----------	151	45.50	74.25	41.50	63.75	238.90	37.40	----------	34
36	84.00	128	48.50	140.25	3.75	107.50	116.00	6.00	100.00	35
12	67.00	200	37.75	17.75	47.10	80.50	106.22	76.75	----------	36
42	47.00	25	31.00	308.02	----------	112.85	121.90	----------	----------	37
28	62.50	200	73.50	185.50	5.25	76.75	51.65	----------	----------	38
20	11.50	150	27.75	21.75	32.75	55.70	38.00	24.00	----------	39
67	171.00	117	40.55	80.75	42.75	26.35	121.25	101.95	25.40	40
7	19.00	148	67.75	81.00	77.00	74.75	61.25	117.25	----------	41
8	30.00	31	29.50	41.50	7.50	121.25	109.25	----------	----------	42
132	332.00	480	264.25	156.00	79.00	80.60	196.75	141.75	----------	43
21	96.00	200	67.50	215.00	56.00	74.00	259.35	95.00	25.00	44
10	13.50	316	96.65	58.34	40.33	50.14	41.17	33.50	1.80	45
25	37.00	200	22.50	54.22	22.78	124.84	198.10	----------	----------	46
34	73.25	251	161.00	246.20	44.00	----------	451.25	186.30	299.50	47
68	184.00	141	98.50	80.50	34.50	51.55	74.50	108.75	----------	48
8	23.00	95	49.50	25.50	18.00	56.25	101.00	51.75	10.00	49
--------	----------	32	23.50	73.50	9.25	67.25	136.00	121.75	65.99	50
12	48.00	188	115.50	29.00	21.50	70.50	45.00	1.00	6.50	51
21	100.50	303	59.75	138.40	109.00	187.00	258.75	133.00	106.50	52
11	21.00	47	28.50	34.25	35.50	125.25	97.25	19.00	----------	53
17	222.00	25	18.00	14.25	8.00	40.00	78.00	----------	16.50	54
26	33.00	157	42.25	79.75	47.50	45.25	48.25	19.00	----------	55
51	149.50	219	156.50	20.75	42.25	18.75	70.50	553.00	6.75	56
--------	----------	133	113.50	39.50	85.00	71.30	208.75	11.00	----------	57
34	67.00	79	37.00	108.75	----------	78.45	8.50	80.50	----------	58
30	85.00	112	30.50	238.75	31.25	43.00	65.75	94.00	50.50	59
52	129.60	106	21.60	72.90	33.08	116.55	117.45	----------	31.50	60
150	489.50	460	126.80	297.00	112.75	125.25	566.00	150.75	----------	61
60	139.00	830	274.90	160.25	68.25	108.45	375.50	229.75	63 50	62
21	53.00	191	170.80	80.25	6.50	25.30	106.10	43.60	----------	63
124	349.00	970	251.05	167.25	144.00	110.50	420.00	449.25	34.50	64

TABLE NO. 3

Number	County and City or Town	Number of exhibitors	Number of exhibitors live stock department	Horses		Cattle		Swine	
				No. exhibited	Premiums paid	No. exhibited	Premiums paid	No. exhibited	Premiums paid
65	Mills, Malvern	110	23	27	147.00	29	246.00	90	284.00
66	Mitchell, Osage	106	27	41	93.00	101	433.00	159	196.00
67	Monona, Onawa	122	41	1	8.00	14	150.00	60	172.00
68	Monroe, Albia	191	46	48	304.00	22	161.50	123	187.50
69	Muscatine, West Liberty	200	90	75	639.00	80	958.00	260	689.00
70	O'Brien, Sheldon	246	32	21	198.00	68	507.00	148	336.50
71	O'Brien, Sutherland	122	32	48	120.50	18	75.00	108	158.00
72	Page, Clarinda	115	22	38	281.00	28	147.00	46	169.00
73	Page, Shenandoah	152	15	25	411.00	22	278.00	175	276.00
74	Pocahontas, Fonda	125	15	-----	---------	25	67.50	75	119.50
75	Pottawattamie, Avoca	118	48	7	44.00	62	483.00	320	545.60
76	Poweshiek, Crinnell	145	48	21	116.50	66	764.00	185	202.00
77	Poweshiek, Malcom	58	14	10	38.00	28	266.00	29	103.00
78	Sac, Sac City	210	25	13	100.20	7	75.60	137	260.10
79	Shelby, Harlan	150	40	35	175.50	75	689.00	275	450.00
80	Sioux, Orange City	84	38	27	144.00	68	187.00	100	192.00
81	Story, Ames	237	55	70	234.00	35	140.00	125	436.00
82	Tama, Toledo	280	63	50	170.50	132	683.50	380	252.50
83	Taylor, Bedford	61	5	9	62.00	17	171.00	-----	---------
84	Van Buren, Milton	56	26	46	687.00	42	454.25	119	221.00
85	Wapello, Ottumwa	316	80	22	160.00	46	259.00	122	146.50
86	Warren, Indianola	236	63	68	728.00	57	390.00	152	344.00
87	Wayne, Corydon	288	66	45	324.00	150	425.00	264	454.50
88	Webster, Fort Dodge	106	89	86	1,128.55	142	839.00	310	344.00
89	Winnebago, Forest City	61	34	15	38.00	53	136.00	107	335.00
90	Winneshiek, Decorah	94	17	3	25.00	26	127.00	186	393.00
91	Woodbury, Sioux City	1,436	244	128	1,074.00	327	2,980.00	2,386	1,582.00
92	Worth, Northwood	106	21	16	70.50	22	88.50	121	198.50
93	Wright, Clarion	95	58	18	197.00	54	400.00	135	563.00
94	Totals 1919	23,751	5,881	4,342	$30,412.15	7,049	$49,285.67	19,815	$34,687.20
95	Totals 1918	21,108	4,863	3,911	$24,230.74	5,579	$31,889.76	12,117	$20,580.31
96	Totals 1917	24,218	4,459	5,552	$28,948.43	5,689	$33,992.13	10,695	$17,213.64
97	Totals 1916	23,955	4,454	6,836	$32,877.66	7,080	$37,440.65	11,151	$17,435.45
98	Totals 1915	20,687	4,144	6,036	$26,913.53	5,270	$27,628.92	9,377	$14,034.45

—Continued.

Sheep		Poultry		Premiums Paid						
No. exhibited	Premiums paid	No. exhibited	Premiums paid	Agricultural products	Fruits, plants and flowers	Culinary products	Fine arts department	School exhibit, boys' and girls' department	All other departments	Number
----------	----------	200	103.00	44.00	20.25	117.25	156.20	5.25	4.00	65
48	98.00	96	58.25	45.50	8.00	30.00	103.80	30.25	20.00	66
12	28.00	21	17.50	87.50	31.50	58.50	146.00	----------	8.00	67
44	217.25	225	121.50	46.25	31.25	47.50	106.25	4.50	73.00	68
60	120.00	210	139.75	142.50	73.25	103.25	242.75	293.75	26.50	69
10	34.00	113	37.00	77.50	22.00	60.45	87.75	35.10	3.75	70
----------	----------	97	19.75	51.75	60.75	----------	221.25	----------	----------	71
31	132.00	147	70.50	117.75	49.25	77.00	182.50	30.35	----------	72
40	61.00	100	42.50	77.00	46.25	45.00	218.25	48.75	4.00	73
----------	----------	40	18.00	56.00	5.00	28.25	88.50	20.00	----------	74
31	68.40	130	68.85	65.00	40.00	45.50	98.20	2.75	9.25	75
32	129.00	76	43.00	38.50	24.50	40.25	87.75	76.00	11.50	76
----------	----------	42	12.00	24.50	27.75	44.50	20.00	9.50	----------	77
14	25.20	158	84.70	46.89	4.50	127.10	148.10	80.64	----------	78
29	84.50	63	36.00	11.50	25.00	11.00	9.00	39.30	236.05	79
----------	----------	75	21.25	33.00	10.60	----------	37.65	135.00	20.00	80
50	99.00	300	103.00	116.50	----------	61.00	60.00	424.00	----------	81
72	224.50	140	70.00	149.50	45.50	168.85	291.05	89.85	6.00	82
----------	----------	35	22.00	18.75	23.75	42.90	102.95	10.30	----------	83
30	92.00	28	20.50	24.00	91.00	52.75	89.00	56.75	----------	84
26	107.00	248	87.85	299.75	10.50	87.50	----------	610.50	----------	85
31	86.00	415	321.25	281.00	46.75	116.00	263.75	43.00	----------	86
145	494.00	173	86.75	221.50	42.75	143.25	85.00	211.75	3.50	87
20	100.00	420	82.10	----------	----------	70.25	----------	----------	----------	88
22	107.50	96	45.25	105.00	----------	27.75	17.75	55.00	----------	89
----------	----------	167	104.00	66.00	65.00	20.00	80.00	----------	----------	90
176	180.00	1,543	162.00	1,027.00	596.00	172.00	406.85	330.10	20.00	91
61	68.25	155	32.00	117.00	52.50	58.80	20.00	28.25	38.50	92
16	54.00	83	83.00	39.25	5.00	26.30	65.75	----------	49.50	93
3,217	$ 8,535.70	17,351	$ 7,143.30	$ 9,958.92	$ 4,213.64	$ 6,168.88	$12,295.95	$ 9,462.68	$ 2,536.27	94
2,895	$ 7,059.30	15,767	$ 6,566.67	$12,088.55	----------	$ 6,680.73	$ 8,639.97	----------	$ 11,570.72	95
3,007	$ 7,120.03	16,184	$ 6,822.27	$11,685.07	----------	$ 6,927.21	$11,251.14	----------	$ 13,266.56	96
2,897	$ 7,291.30	15,762	$ 6,678.76	$11,993.45	----------	$ 6,611.62	$11,176.08	----------	$ 13,122.53	97
2,783	$ 6,140.77	14,317	$ 5,397.08	$ 9,534.51	----------	$ 6,307.62	$ 8,710.29	----------	$ 12,711.43	98

TABLE NO. 4—TOTAL PAID ADMISSIONS AND ADMISSION FEES CHARGED AT COUNTY AND DISTRICT FAIRS IN IOWA FOR 1919.

Number	County and City or Town	Total attendance	Total paid admissions	Outside Gate Admission			Grandstand		
				Adult	Vehicle	Children	Admissions	Total day admissions	Total night admissions
1	Adair, Greenfield	9,177	9,177	50	25	25	15	1,321	--------
2	Adams, Corning	8,312	8,000	50	25	25	15	1,700	--------
3	Allamakee, Waukon	7,000	6,650	50	25	25	25	547	--------
4	Audubon, Audubon	15,000	14,500	50	35	25	25	3,000	2,000
5	Benton, Vinton	16,472	14,694	50	25	25	25	3,077	1,379
6	Black Hawk, Cedar Falls	36,835	26,635	50	50	25	35	12,261	6,332
7	Black Hawk, Waterloo	70,280	54,928	50	50	25	25	10,677	16,570
8	Boone, Ogden	8,000	7,401	50	50	25	15	1,532	--------
9	Bremer, Waverly	35,842	28,947	50	----	25	25	13,472	--------
10	Buchanan, Aurora	4,224	4,076	35	35	20	----	--------	--------
11	Buchanan, Jesup	14,360	13,132	35	25	25	----	--------	--------
12	Buena Vista, Alta	18,032	16,032	50	25	25	25	3,342	--------
13	Butler, Allison	11,500	10,669	50	25	25	15	2,359	1,109
14	Calhoun, Manson	14,752	12,277	50	25	25	25	3,414	1,541
15	Calhoun, Rockwell City	10,000	8,171	50	25	50	35	1,938	--------
16	Carroll, Carroll	6,510	6,177	50	35	25	25	1,517	--------
17	Cass, Atlantic	25,683	24,000	50	25	25	25	6,084	1,243
18	Cass, Massena	5,453	5,453	50	25	25	15	742	--------
19	Cedar, Tipton	18,000	14,250	50	50	25	25	3,150	759
20	Cerro Gordo, Mason City	45,965	34,965	50	25	15	25	15,829	7,850
21	Clarke, Osceola	3,000	--------	----	----	----	----	--------	--------
22	Clay, Spencer	48,000	27,758	50	25	25	35	9,508	6,841
23	Clayton, Elkader	6,000	5,186	50	25	25	25	1,149	--------
24	Clayton, National	5,556	4,172	35	50	25	25	620	--------
25	Clayton, Strawberry Point	10,000	8,000	50	25	15	25	2,500	1,000
26	Clinton, DeWitt	26,000	19,937	50	50	15	25	5,794	--------
27	Crawford, Arion	5,500	4,441	50	50	25	25	685	--------
28	Dallas, Waukee	2,500	--------	----	----	----	----	--------	--------
29	Davis, Bloomfield	25,000	20,684	35	25	15	25	4,894	--------
30	Delaware, Manchester	18,000	12,554	50	----	25	25	2,889	1,530
31	Des Moines, Burlington	38,537	36,012	50	25	25	25	16,558	16,797
32	Dickinson, Spirit Lake	7,387	7,284	50	25	25	25	1,948	1,074
33	Fayette, West Union	30,000	17,604	35	50	----	25	4,778	2,191
34	Fremont, Hamburg	18,000	6,277	50	25	25	----	--------	--------
35	Greene, Jefferson	16,541	16,541	50	25	25	25	5,442	5,810
36	Grundy, Grundy Center	10,000	10,000	50	35	25	25	1,316	--------
37	Guthrie, Guthrie Center	8,000	5,902	50	35	25	----	--------	--------
38	Hamilton, Webster City	8,000	6,017	50	25	25	----	--------	--------
39	Hancock, Britt	16,000	13,750	50	35	25	----	2,423	--------
40	Hardin, Eldora	9,783	9,783	50	25	25	25	2,339	660
41	Harrison, Missouri Valley	12,000	10,780	50	35	25	25	2,700	--------
42	Henry, Mt. Pleasant	32,000	22,859	50	25	10	25	6,380	5,000
43	Henry, Winfield	4,800	4,000	50	25	25	25	1,830	--------
44	Humboldt, Humboldt	18,000	13,431	50	25	----	25	2,630	1,909
45	Iowa, Williamsburg	7,041	7,041	50	50	25	25	1,528	--------
46	Jackson, Maquoketa	14,000	9,359	50	50	15	25	4,041	--------
47	Jasper, Newton	10,279	10,279	35	35	----	25	3,788	2,165
48	Jefferson, Fairfield	7,327	6,896	50	25	25	25	1,821	1,368
49	Jones, Anamosa	7,784	7,413	50	25	25	25	5,617	--------
50	Jones, Monticello	20,800	15,600	50	25	25	25	4,976	3,610
51	Keokuk, What Cheer	1,500	966	50	25	25	25	421	--------
52	Kossuth, Algona	43,000	18,500	50	25	25	25	3,004	1,009
53	Lee, Donnellson	5,700	5,465	50	25	25	25	540	--------
54	Lee, West Point	3,000	2,764	50	25	----	----	--------	--------
55	Linn, Central City	12,780	11,700	50	50	25	25	4,300	3,200
56	Linn, Marion	17,712	15,000	50	25	25	25	4,800	2,200
57	Louisa, Columbus Junction	14,061	13,703	50	25	25	25	4,713	2,332
58	Lucas, Derby	3,703	3,703	25	25	15	----	--------	--------
59	Lyon, Rock Rapids	28,000	22,272	50	25	25	25	7,787	--------
60	Mahaska, New Sharon	10,200	10,020	35	25	----	25	2,474	1,000
61	Mahaska, Oskaloosa	66,537	56,865	50	25	25	25	12,504	13,024
62	Marion, Knoxville	22,300	21,349	50	25	----	25	5,980	4,225
63	Marion, Pella	6,000	4,096	50	25	----	25	1,519	2,442
64	Marshall, Marshalltown	47,700	37,700	50	25	25	25	8,329	3,620

TABLE NO. 4—Continued.

Number	County and City or Town	Total attendance	Total paid admissions	Outside Gate Admission			Grandstand		
				Adult	Vehicle	Children	Admissions	Total day admissions	Total night admissions
65	Mills, Malvern	15,000	13,500	50	25	25	25	6,400	--------
66	Mitchell, Osage	11,434	10,434	50	----	25	25	1,878	993
67	Monona, Onawa	4,477	4,252	50	----	25	25	1,901	--------
68	Monroe, Albia	8,000	7,434	50	25	15	15	4,290	--------
69	Muscatine, West Liberty	28,800	24,862	50	50	25	25	10,629	6,301
70	O'Brien, Sheldon	23,000	22,484	50	50	25	25	2,083	1,042
71	O'Brien, Sutherland	9,597	8,597	50	50	25	35	591	457
72	Page, Clarinda	18,750	13,421	50	25	25	25	1,825	3,369
73	Page, Shenandoah	15,000	14,132	50	25	25	25	2,782	--------
74	Pocahontas, Fonda	9,000	8,500	50	25	35	25	1,200	--------
75	Pottawattamie, Avoca	11,598	7,027	50	----	25	25	2,340	--------
76	Poweshiek, Grinnell	12,687	5,971	50	25	----	25	4,352	3,102
77	Poweshiek, Malcom	4,068	2,568	50	25	25	25	1,064	--------
78	Sac, Sac City	10,263	10,263	50	25	25	25	3,528	620
79	Shelby, Harlan	30,000	19,698	35	35	20	25	6,603	2,953
80	Sioux, Orange City	8,040	7,040	50	50	25	25	934	581
81	Story, Ames	9,908	8,308	50	25	15	----	--------	--------
82	Tama, Toledo	7,550	7,267	50	25	25	25	1,498	--------
83	Taylor, Bedford	10,601	10,601	50	25	25	25	1,249	260
84	Van Buren, Milton	6,000	5,000	50	25	----	----	5,000	--------
85	Wapello, Ottumwa	6,000	2,334	25	----	10	----	--------	--------
86	Warren, Indianola	6,726	6,626	50	25	25	25	3,285	--------
87	Wayne, Corydon	40,000	20,082	50	25	----	25	17,086	488
88	Webster, Fort Dodge	33,791	22,902	50	---	25	50	12,995	8,247
89	Winnebago, Forest City	9,500	9,130	50	25	25	25	1,913	1,497
90	Winneshiek, Decorah	23,450	19,132	60	---	25	25	1,504	601
91	Woodbury, Sioux City	117,470	103,515	50	----	25	50	21,820	7,828
92	Worth, Northwood	7,000	5,000	35	25	----	15	1,000	--------
93	Wright, Clarion	12,000	9,119	50	25	25	25	2,350	--------
94	Totals 1919	1,619,135	1,526,996	----	----	----	----	362,587	160,135
95	Totals 1918	1,150,461	910,349	----	----	----	----	226,661	75,795
96	Totals 1917	1,345,259	1,09[illegible],968	----	----	----	----	270,991	91,766
97	Totals 1916	1,272,479	991,057	----	----	----	----	279,714	66,600
98	Totals 1915	1,115,605	838,047	----	----	----	----	--------	--------

Admission Fees Paid	60 Cents	50 Cents	35 Cents	25 Cents	20 Cents	15 Cents	10 Cents	No Chge.
Gen. admission, outside gates:								
Adults	1	79	9	2	------	------	------	2
Vehicles	------	15	9	58	------	------	------	11
Children	------	1	1	66	2	8	2	13
Grandstand admissions	------	------	------	------	------	------	------	------
Quarter stretch admissions:								
Persons	------	------	1	34	------	4	------	54
Vehicles	------	1	1	14	------	------	------	77

IOWA STATE FAIR

The Sixty-fifth Annual Iowa State Fair and Exposition will long be remembered as a record breaker from many viewpoints. The fair was held under most favorable conditions. Inasmuch as the war was over a greater portion of the boys had returned to the state and were engaged in their old or new occupations. This greatly relieved the labor situation which had a tendency to keep down the attendance and reduce the exhibits in 1918.

The weather was about what it would have been had it been possible for the management to place the order. With the exception of a slight shower Sunday morning, which removed all dust from the buildings and walks and brightened all vegetation, the balance of the week was fair and just about the right temperature to warrant a good attendance and to make it comfortable for those availing themselves of the camp ground privileges.

The total attendance of the fair was 408,147. This made a new record as it exceeded the 1918 attendance by 83,770 and 1917 attendance, which was the previous record year, by 58,849. The attendance on Tuesday was 78,612 and established a new record for one day. Thursday of 1918 had held the record up to this time with an attendance of 67,072.

In connection with the attendance it is of interest to note the increase in the number of automobiles admitted to the grounds each year. In 1917, the first year a record was kept of the number of cars admitted, it was found 31,990 were admitted; in 1918, 44,432 and in 1919, 52,889. Estimating four passengers to the car over one-half of the attendance in 1919 reached the fair in automobiles. The record day was on Tuesday when 10,213 automobiles were admitted to the grounds.

The performances in front of the grandstand, both afternoon and evening, showed to capacity crowds and were thoroughly enjoyed by those in attendance.

There were 91,017 admissions to the seven afternoon performances compared with 87,775 in 1918 and 108,634 admissions to the six night performances compared with 80,089 in 1918. The largest attendance at any one performance was on Monday night when 24,719 were admitted. This is just double the seating capacity of the grandstand and bleachers and emphasized the need of additional grandstand room to accommodate the crowds attending these performances.

The night live stock and horse show in the Stock Pavilion enjoyed a record-breaking attendance and the show was particularly pleasing to the lover of harness and saddle horses and pure bred live stock.

The exhibits were the best balanced, the most comprehensive and the most extensive in the history of the fair. The showing in the various departments was made by 2,399 individual exhibitors who made 17,801 entries. This number of entries does not take into consideration the exhibits entered in the machinery department and various other educational exhibits for which no premiums were offered. There was on exhibition by actual count 5,537 head of live stock, divided as follows: 472 horses, not including 160 head entered in the speed events, 1,013 head of cattle, 3,197 swine, 784 sheep and 71 goats. There were also on exhibition in the poultry department 2,100 birds and 190 rabbits.

There is attached hereto and made a part of this report tabulations covering the attendance by days, statistical data relative to number of exhibitors, number head of live stock and other exhibits at the fair compared with former years.

In lieu of any attempt to review the various departments of the fair there is presented herewith the press reports of three leading live stock and agricultural papers having a large corp of reporters in attendance each day of the fair.

These reports are submitted with the thought that they will give an unbiased report of the fair and with full knowledge that they were prepared by expert writers who are authorities upon the subjects they have covered.

THE CLIMAX OF IOWA'S EXPOSITIONS.

From The Breeders' Gazette, Chicago, Illinois.

Iowa's commanding position as a dependable yearly producer of wealth from the highest-priced agricultural real estate of a corresponding area in America was re-emphasized in Des Moines last week by the most elaborate, comprehensive and successful exposition of its kind in history. In its overwhelming and distinctive agricultural appeal, composition and educational results, the Iowa State Fair stands unique and monumental among similar institutions. Iowa, the Croesus and Colossus of farming states, celebrated the conclusion of the war by a victory fair of historic magnitude, seen and appreciated by 406,000 people during the nine auspicious days of its duration. Total receipts were $310,000, and net profits $70,000, as estimated on Saturday last by Secretary A. R. Corey.

These sentences are attempts at reducing a maze of impressions of a prodigy of wonder, fascination, interest, amusement and buzzing action to a statement of fact. But the stupendous fact of the fair itself cannot be translated into language. Happily it was registered in the minds of the multitudes that saw it, and the extent to which this is true measures the degree in which the instructive and inspiring lessons of the magnificent festival and gigantic exhibition will contribute values to the future economic and social structure of the state.

It has been a year of plenty in Iowa. A billion dollars' worth of wealth in the form of crops will be the state's contribution to the world's larder this year. A big corn yield of high average quality is in prospect. The bulk of it is reasonably secure from damage by frost. An immense tonnage of hay has been saved. Small grain harvests were uncommonly large. Meadows and pastures are in first-class condition, ensuring an abundance of fall grazing. Thousands of western sheep and lambs are thriving on this herbage and in stubblefields. The rainfall in recent weeks has been highly favorable to the maturing of corn, and the continued vigorous growth of forage. Fall plowing is under way. Land values have increased, running up in some sections to $400 to $500 or more per acre. A considerable acreage has changed hands. It is obvious that the generality of Iowa farmers possess more money and property, owe fewer debts and are living better than ever before. It is no wonder that their fair "looked like a billion dollars." The farmer who has not prospered in Iowa the past few years is a prevaricator or a failure. If he is either he is probably both.

Iowa has the nearest to a single-purpose agricultural show in America. Apart from a few scattered vaudeville acts and a minutely compressed midway, there is not one feature at this fair that does not definitely relate to the work and welfare of Iowa farm people. Iowa's boys and girls proudly presented their prowess in baby beeves and personally-raised pigs, and in canned fruits and vegetables, and innumerable varieties of stitch-craft—all earnests of an interested rural manhood and womanhood for Iowa‘s future. One hundred fifty-six boys and girls showed baby beeves, seventy showed pigs and 235 participated in the stock and grain judging contests. A forward step in the direction of the farm boy was found in the boys' camp. Two hundred lads from many parts of the state were given a few duties in partial preparation for the privileges the fair accorded them, and were treated to the best of educational exhibits and amusements. Camp discipline and routine were established, based on military and Boy Scout precedents. Each day from 4:30 to 5:30 the recreation hour, the Y. M. C. A. assistant physical director in Des Moines initiated the boys into the intricacies and joys of the supervised community games of the city: volley ball, indoor baseball, and numerous other forms of amusement that could gain a healthy footing at the little white school house or other community center.

The boys' stock and grain judging contest in many ways outdid itself. For the first time girls were admitted, and two lined up with the 233 boys.

In addition all entry records were smashed, 238 filing applications. Furthermore, the entrants competed individually and also as teams of three from their respective counties, after a preliminary contest under the supervision of the county agricultural advisors. Polk county won, with a total of 1,956 points out of a possible 2,400. The members of the team were Edward Menough, Grimes; Merwin Smith, Des Moines; and De Wight Kinsey, Grimes. Forty points behind came Hamilton county with Johnson, Clinton, Woodbury, Greene, O'Brien, Monona, Dickinson, Boone, Marshall, Crawford, Muscatine, Wapello, Jasper, Washington, Adams, Clarke, Van Buren, Webster, Cherokee, Cass and Worth winning prizes in the order named. The total value of the prizes was $40. The highest possible score was 800, with six classes of stock and two of grain to judge. For the fourth time in eleven years a boy from Warren county won first.

The baby show continues to be a potent factor in educating mothers as to infant needs and showing in a scientifically demonstrable way the wonders of their babies. "Everyone knows his own youngster is the finest in the world; the baby show tells why." More than 300 babies, with innumerable "rooters," disputed brains, brawn and beauty in the competitions.

Motors are coming to be common among farm interests. Whether expressed in the little one-cylinder engine for the well or feed grinder or washing machine, in the tractor, or in the automobile, motors are integral parts of farm equipment. Forty-five types of small stationary engines suitable for chores and odd jobs were on display, while tractor styles were legion. Iowa has more than 400,000 automobiles registered, and the show in the big machinery pavilion represented every popular make. The class of car used by the Iowa farmer shows a steady increase in size, power and usefulness each year, and with the rise in car standards comes an awakened community conscience on the road problem. There remain now only the three eastern counties in Iowa's second tier from the north that have not voted for paved roads. It is as morally certain as votes can make it that next year will see a paved highway under construction to cross the 300 miles of the state. As a factor in the molding of community ideals the automobile has become Iowa's greatest unifying agency.

Farm machinery, apart from motors, has almost assumed a secondary importance. Not that the entries this year rivalled in numbers, quality and variety those of preceding years—in some directions they manifestly excelled—but that the motor offshoot of farm machinery has outgrown its parent. Furthermore, farm machinery has become so well standardized that the competition of ten years ago among machinery salesmen is practically non-existent. One can report little that is new for field operations. Devices tending to greater handiness of operation were numerous. The farm home is receiving the immediate attention of machinery manufacturers. Washing devices, lighting and heating plants, water and sewage systems, home elevators, and a score of other devices to save steps and stoops for women featured the show.

But the fair has gone far beyond the home into the community. Thirty-six district and county rural schools contested the products of their pupils, artistry being mingled with artisanship, as geography, painting and model-ing appeared alongside of splices, knots, hitches, patches and garments. The state board of public health furnished convincing educational posters dealing with influenza, and tubercular and sex hygiene questions. The state library association not only exhibited a variety of its traveling libraries, but made engagements for hundreds of hamlets and rural communities that hitherto had been limited in library facilities.

As usual the state agricultural college furnished an exhibit of methods of agricultural improvement for the entire farm. Demonstrations of the results of spraying fruit, sanitary milk and butter production, the use of improved sires, the value of testing for dairy production and the need of quality products were presented by striking exhibits. Girls from the county clubs took turns in demonstrating methods of canning fruit, and cooking the staples of the farm menu in an appetizing way.

The campers' city grows each year. The eastern grounds housed more than 20,000 people in tents who came to study the fair at their leisure. Certain families have become so pleased with this type of outing that they have built concrete foundations for their tents, to be reserved so long as they regularly attend the fair.

The last legislature appropriated $54,000 for the purchase of 30 acres to the north of the grandstand. This is being developed into a landing field for aviation, and as an area for tractor and farm machine demonstrations. Aviation as an amusement feature was strongly developed this year, and with proper facilities in future will become one of the leading departments.

Due to the co-operation of the War Department, an excellent military display was made available for the Iowa Home folk. A heavy and a light tank, a tractor-drawn 155-mm. howitzer, a 4.7-inch gun, an anti-air craft 75-mm. rifle mounted on a truck, and a complete field hospital equipment furnished two parades daily, and were so disposed as to permit minute inspection. The public safety at the fair was maintained by discharged infantrymen of the Rainbow Division, while the first Saturday of the fair was a soldier, sailor and marine day. More than 15,000 men in uniform were on the grounds.

In some branches the live stock exhibit soared. Of hogs there were 3,197 head shown. In the major breeds the largest classes and evenest quality in the history of the fair prevailed. Sheep also took an upward jump, with home-bred and imported animals vying with one another. Fine-wools picked up this season, and three classifications had full entries. Horses were affected by the general market depression, and their numbers were reduced as compared with past years. Quality was high, however, in this section, and a number of new farmer-breeders made their initial bow. The night horse show brought out some big saddle and harness rings, although many of the stables of past years were not represented.

On Thursday afternoon, following the conclusion of the judging in the live stock department, a parade of the horses and cattle round the race track was a memorable sight. It was admirably conducted, and left an exalting impression on the thousands who witnessed it.

THE CATTLE.

More than 1,000 cattle were on exhibition. Shorthorns led, with 200 individuals, followed by 156 baby beeves; Herefords, 153; Holstein-Friesians ,134; Aberdeen-Angus, 92; Red Polls, 66; Jerseys, 53; Guernseys, 51; Brown Swiss, 49; Ayrshires, 31; Milking Shorthorns, 17, and Polled Shorthorns, 11. For the first time in nearly ten years no Galloways were shown. More than half of the exhibitors were new to the fair, due to the amateur classes and the large number of boys and girls showing in the steer rings, while nearly half of the remainder were men now emerging from a restricted field of operations into that of larger breeders. Although we missed the faces of many old-timers, yet the challenge of the new was an inspiration.

In some respects the cattle show was an overflow. The old barns, veterans of some quarter of a century, at last have reached their limit, and some of the Red Poll entries were forced to seek temporary shelter in the horse barns. But next year will see a substantial new cattle barn. Consonant with the Iowa fair's motto of "comfort for each exhibitor," there will be erected on the site of the old barns a modern structure capable of housing between 1,600 and 1,700 show animals. The legislature appropriated $100,000 for it. First-class sleeping quarters for herdsmen will be provided overhead, and two modern concrete wash racks and a capacious salering will be included. The superintendent will be provided with new and comfortable quarters, replacing the two little booths in the judging pavilion that have served many years. Cattle exhibitors next year will enjoy the best of accommodations.

As an additional encouragement to Iowa breeders, the cattle department this year offered cash awards in each of the major breeds for Iowans who had never before exhibited at the state fair—$500 in each breed. Twenty-one new Shorthorn breeders exhibited, four new Hereford breeders, seven new Aberdeen-Angus breeders, three new Holstein-Friesian breeders, two new Jersey breeders, and one new Guernsey breeder. Some excellent entries were brought out.

THE HORSE DEPARTMENT.

Horses made as good an all-around exhibition at the 1919 Iowa State Fair as ever was seen at Des Moines. Aged classes have been larger in times past but they seldom were stronger. In the younger classes numbers were generous and the merit was of a high order. It was distinctly a breeders' show and accordingly attracted the best young things which American talent can produce. The show proved beyond a doubt that many breeders look forward with confidence to improved conditions and higher prices. They are ready with animals to offer as fast as demand develops.

Talk at the ringside dwelt upon the increasing inquiry for good mares and fillies of all four of the draft breeds as the fall season draws near. Concrete evidence of this was seen in the sale at the fair of a Belgian filly foal for $1,500 before the ribbons were tied. That is not an extravagant figure measured by the thousands of dollars paid recently for single boars, bulls and cows, but it indicates confidence in the money-making future of pedigree horses.

The horse show gained something in numbers no doubt as well as in excellence and popular interest as compared with other fairs by reason of the eight futurity classes for yearlings. Year by year it seems that these groups are composed of just a little stronger material as compared with earlier shows. Great progress has been made since the first futurity event several years ago. The whole of Tuesday morning was given over to judging the two futurities of each breed.

The custom of recent origin here was followed in judging all of the classes as scheduled in a published program giving the hour for each event. No class callers scoured the barns. Leaders brought in their animals at the hour indicated. The plan also proves a great convenience to fair visitors, because one can see just the classes he is most interested in without waiting around for fear they will be judged unexpectedly while he is looking at something else.

Another idea which some of the other large fairs might copy with benefit is that of having a separate judge for each of the four draft breeds. The confidence of exhibitors is secured thereby and the awards are likely to be made more consistently. It is impossible for a single judge to do such good work upon all four of the breeds as he does upon the one with which he is especially familiar.

A conspicuous condition in the horse classes was the superior shape and quality of legs and feet and the mechanical correctness of action. These features are fast becoming established as staple characteristics of American draft horses of whatever breed. This fact is a credit to the promptness with which breeders have grasped the showring lessons of recent years.

THE SWINE SHOW.

The fair reached a new climax in a series of hog exhibitions extending over the sixty-five years of its history. Never before have the pens been so crowded and tent space so well utilized. Approximately 3,200 head were on the grounds The numerical strength of the younger ages of the more popular breeds completely overtaxed the space available in the judging pavilion. Added to this was a capacity crowd each day, absorbed in the judging, and overflowing the alleys. The judges worked under adverse conditions, which, in justice to future adjudicators, should be corrected. The exhibitors, largely from within the boundaries of Iowa, had competition with a few herds from neighboring states, but it was chiefly an Iowa show. Public interest in the breeds has never been so keen. High pork prices have had much to do in adding new men to the purebred ranks. Sales were numerous, and in some cases at exceptionally long prices: Ten thousand dollar hogs have ceased to create sensations, and at least one sale at that price was reported. While the consumer is complaining of the cost of breakfast bacon, this factor is working constantly to improve the kind of hogs produced. Good barrows are more profitable than mediocre boars. Feed and labor are not cheap; accordingly the growing of pigs into the pork barrel rather than the breeding herd is attractive. Four breeds were represented by large numbers. Duroc-Jerseys and Poland-Chinas filled the greatest number of pens, Chester Whites and Hampshires not being far behind. Berkshires were a creditable show, disclosing a marked improvement over last year's exhibit. Spotted Poland-Chinas drew public attention with a number of good herds. The bacon breeds had much their usual showing, and one herd of Mule-footed hogs was exhibited.

The boys' and girls' pig club made an interesting division of the swine show. Sixty-nine pigs were exhibited by the juniors; of these twenty were Duroc-Jerseys, seventeen Hampshires, thirteen Poland-Chinas, nine Chester Whites, and two Tamworths were shown.

THE SHEEP SHOW.

One outstanding feature of the fair was the creditable sheep show. There were 784 head on the grounds, of which 659 were mutton sheep and 125 fine-wools. Shropshires led, with 275; Oxfords, 121; Cotswolds, 93; Merinos, 74; Hampshires, 72; Southdown, 58; Rambouillets, 28; Cheviots, 27; Leicesters, 6; Lincolns, 6; Angora goats, 15; milk goats, 56. Wm. E. Renk, Sun Prairie, Wis., judged all the mutton breeds, and Carlos J. Fawcett, Malcolm, Ia., the fine wools. Mr. Fawcett also judged the wool exhibit. Both men did excellent work. The sheep exhibit has disclosed improvement each year and indicated the increasing interest that Iowa farmers are taking in sheepraising. The entries were about one-third larger than in any previous year. Breeders of the fine-wools were of opinion that there never had been so good a show of their favorites in Iowa. Sheepmen have never before had so many calls for rams and ewes as they had this year at the fair. Men want good individuals and will pay the money. The wool show attracted a great deal of attention, especially the grades of wool that the Iowa Wool Growers' Association had placed on exhibition. Never before have the Iowa farmers had an opportunity of studying the grades of wool that they are growing. The association has 3,385 members, and shipped 1,000,000 pounds of wool co-operatively this year. A large amount has been sold. The wool exhibit should have been placed where it would have been seen by more people. The shearing and blocking contest was intresting and instructive. Large crowds watched the men work. C. C. Croxen, West Liberty, Ia.; E. L. Bitterman, Nora Springs, Ia., and John Graham, Eldora, Ia., three experienced sheepmen, acted as judges. If the sheep industry continues to go forward in Iowa it will soon be necessary to build an addition to the sheep barn. All pens were filled this year.

IOWA'S GREATEST STATE FAIR.

From Wallaces' Farmer, Des Moines, Iowa.

With a total attendance of 408,185 and total gross receipts of $320,000, the 1919 Iowa State Fair closed last Friday, after setting new records in practically every department of the fair.

The attendance showed an increase of nearly one hundred thousand over last year, and the receipts exceeded those of 1918 by nearly that many dollars. The net profits of the fair will probably be close to fifty thousand dollars.

The increase in receipts was in a measure expected, but the tremendous rush of fair visitors was beyond any but the most sanguine expectations. A week before the fair, a street car strike in Des Moines threatened to keep many away from the fair; railroad troubles were discouraging exhibitors and sight-seers, and fair officials were legitimately anxious as to the outcome.

When the fair got under way, however, matters seemed to clear up. The street car question was settled; railroad service, for the moment at least, was less disturbed, and the weather, often the bane of the Iowa fair, forgot its customary behavior and permitted ten days of cool, clear weather that suggested October rather than August.

The crowds began to gather earlier than usual this year. The first days had a larger attendance than is customary, and on Friday and Saturday the fair hit its gait and ran the attendance up to the 40,000 mark. Tuesday set the record for attendance at 76,406, but Wednesday failed of that mark only by a few thousand, and crowds continued to pour through the turnstiles up until the late afternoon of the last day.

State fair officials constantly made optimistic estimates during the progress of the fair, only to have their hopes overtaken by the reality. President Cameron, of the state fair board, looked over Saturday's crowd, and in a moment of enthusiasm prophesied that Monday would see fifty thousand pass thru the gates. Considering that Monday in 1918 yielded less than forty thousand admissions, this guess was sufficiently sanguine. As a matter of fact, the attendance on Monday of this year was 60,680, twenty thousand better than last year, and ten thousand better than the fair's most hopeful supporter had looked for.

Transportation for this flood of visitors was provided in large part by the farmers themselves. The forty-acre parking space provided by the state was crowded daily, and the grounds were surrounded by lines of machines at all hours. Estimates were made that twenty million dollars' worth of automobiles were on or about the grounds.

Even with this assistance, the trains into the city were packed and transportation to the fair grounds was at a premium at all hours. Street cars at five cents, bus lines at ten cents, and automobiles at twenty-five cents a ride all were filled to the limit, and kept the streets to the grounds filled with a continuous stream of traffic.

Many of the visitors were not content with seeing the fair alone. Parties went to various spots of interest in Des Moines, surveyed the business district, looked over the parks, walked thru the city buildings on the river front, and in great numbers thronged the halls of the capitol and the state historical building.

The receipts from concessions, attendance and other sources went largely this year to pay for the improvements that have been made and for the increasing cost of upkeep of the grounds and for running expenses. There will be sufficient profit, however, to make sure that the new cattle barn, for which the last legislature made an appropriation, will be constructed on the original scale planned, even tho the cost of materials has increased since the first estimates were made. Another possibility is the building of additional wings to the grandstand. Most of those who stood in line for hours waiting for tickets and then considered themselves lucky to buy standing room will assent heartily to any such plans.

The financial success of the fair, however, can only be considered as incidental. As an education in what Iowa is doing in agricultural lines, and as a stimulus to great effort in the future, the fair attains its greatest usefulness. These main purposes were stressed even more strongly than usual this year.

The live stock show was, as always, the outstanding feature of the fair. All departments were well represented, but the Iowa hog dominated the field. In all probability it was the greatest hog show ever held. The increasing tendency of breeders to work for big type animals with frame and vigor was shown in all exhibits.

The agricultural college exhibit this year concentrated largely on the spraying of apples. On the one hand was a pile of upsprayed apples, wormy and blotchy with disase; on the other was a pile of smooth, healthy, sprayed apples. In bottles were the materials used—the arsenate of lead, the copper sulphate, the lime, etc. And, best of all, people were at hand to explain. The college exhibit is oftentimes "old stuff," but it is always one of the most educational exhibits on the grounds.

There is always a tendency to overlook the corn and small grain show. Judge L. C. Burnett pronounced the exhibit this year to be one of unusual quality. In order to promote more interest in the corn show, we would suggest that prizes be offered for this year's corn. Of course, corn of the current year would be immature, but prizes on such a basis would stimulate to an unusual degree the breeding of corn for early maturity combined with size.

The government and state, in a little tent near the stock pavilion, were prepared to tell Iowa farmers how they might take advantage of the new tuberculosis law. Thousands of Iowa farmers were astonished to learn how advantageously they might clean up their herds.

Aside from the live stock, machinery draws more attention than anything else. Nearly two hundred tractors, of all shapes and sizes, were on exhibition. And this year farmers studied them more than ever before. New silage handling devices are always of interest, and this year special attention was devoted to a machine cutting the silage in the field. There were a multitude of self-feeders of different types, with modern improvements to prevent waste and keep out rain. Continually new things are being invented to lighten the burden of the Iowa farmer, and in the course of time many of those new things prove exceedingly practical.

The size of the fair exhibits in actual bulk was impressively shown by the announcement that four hundred and fifty-one freight cars were required to handle the job on the railroads. Of this total, three hundred and eighty-eight, or seventy-five per cent, were used for live stock. And this, of course, included only the exhibits that were shipped by rail for some little distance. Much material came by truck or automobile, and it must be remembered that the material supplied on the fair grounds by the management was a not inconsiderable part.

The exhibits of tanks, guns and small arms, under the grandstand and in a neighboring field, together with the crowds of men with the buttons or uniforms that showed their membership in one of the three groups of war veterans, made an interesting and timely feature of the fair. The soldiers of '61 took an especial interest in noting the gas masks, automatic rifles, grenades and other ordnance that differed so widely from the equipment they carried in the campaigns of sixty years ago.

The women and children had, as usual, their particular building with a continual program of interest. Style shows, culinary exhibits, baby shows —every interest of the modern farm woman was covered in some way by the exhibits and daily program. The nursery was a popular place, and the nurse in charge had scores of babies under her care all the time. A similar boon to the tired mother with children of older age was furnished in the playground, where the little folks could be left to play under supervision.

The exhibits of the various farmers' organizations at the fair showed how deeply interested the Iowa farmer is in the subject of organization. One of the most popular booths in the agricultural building was that of the State Farm Bureau Federation. Farm bureau members from the ninety-nine counties of Iowa dropped in here by the thousands to register and exchange a bit of gossip. The Farmers' Union tent displayed the machinery, groceries, etc., which the exchange of this organization has for sale. In the southeastern part of the state this farmers' co-operative business organization has made real headway. The Farmers' Equity people also had a tent. Their organizers report considerable interest this year in farmers' co-operative enterprises.

Three big parades were the principal events of each of the last three days of the fair. On Wednesday, the boys and girls made a spectacular display of the work of the junior clubs in agricultural subjects. On Thursday, the million-dollar live stock parade took place, and the watchers that crowded the grandstand and bleachers were able to see the concrete reasons for a good part of the success of the Iowa farmer. On the last day, a parade of motor trucks, placed four abreast, filled the track and presented an impressive prophecy of the future trend of rural tranportation methods.

YOUNG IOWA AT THE FAIR

Iowa boys showed themselves to be one notch behind Iowa girls in all-around ability in the contests that featured the boys' and girls' club work last week at the Iowa State Fair. The girls went into all the canning and bread-making demonstrations, and in addition were able to furnish from their ranks some owners of prize-winning stock. The less versatile boys contented themselves with beeves and hogs, and showed no desire to get in on the money by demonstrating the excellencies of the cold-pack method.

Pig-club work apparently appeals to the ambitious girl as well as to the ambitious boy, and altho there were a comparatively small number of girls in the work, they took more than their share of prizes. The entries of two won firsts in their respective classes. Hazel Thomas, of Iowa City, took first with the champion junior boar pig of all breeds, and Flora Hoskins, of Cantril, took first honors on her junior sow pig.

Even F. P. Reed, of Iowa State College, who was in charge of the boys' club camp, and was backing his boys to the limit, was willing to own that the girls in the contests had made a fine showing.

"As a matter of fact," he admitted, "girls very often take better care of their pigs than the boys do. They've brought some mighty good pigs here."

But the boys and Mr. Reed can afford to be generous. They won seven out of the nine classes in the pig club contests, and won the first thirteen places in the calf-feeding contest. Josephine Garden, of Wapello, winner of second place last year, finished fourteenth. Not satisfied with this, however, they sent their baby beeves out in the open competition in fat cattle, and came back with a satisfying collection of ribbons.

Cleo Korns, of Hartwick, had three ribbons hanging over the stall of his yearling Angus steer, and only one of them was won in the calf-feeding contest. He took first there, and then went into the pure-bred Angus fat cattle competition. He won first in the yearling class and the championship as well.

Cleo and his brother, Calvin, have made a good record thruout this fair season. Calvin is fifteen and his brother two years older. Last November they picked two calves out of their father's herd, and started to feed. Corn, oats, oil meal and hay was the ration, and on this the winning steer made an average daily gain of one and one-half pounds over the 294-day feeding period.

At the Grinnell, Iowa, fair, the boys took first and fourth in the calf-feeding competition. Calvin's yearling came out ahead there. The state fair judge, however, reversed that decision and gave Cleo's Black Robin the ribbon. Calvin took fourth.

"This is great experience and fun and all that," someone said to young Korns, "but aside from the ribbons, what are you getting out of this work?"

The boy figured a minute. "This is the third fair," he answered, "and we have won something at each place. It totals up to one hundred and forty-one dollars. Then there is the price that the steer will bring when he is finally sold."

He grinned suddenly. "And you might add to that," he suggested, "the amount we'll get at the International at Chicago."

For Black Robin is going to the International to try his luck with the pick of other states. And while Cleo Korns has had enough fair experience to know what he is up against, and while he jokes at the thought of winning there, still there is a hope that perhaps the Angus youngster may clean up. And this is a surmise that a great many stockmen who saw the steer in the ring are quite ready to share.

Another boy who was able to step out of the calf-feeding class and take prizes away from his seniors is Ora Campbell, of Dallas, Iowa. Ora had one pure-bred Hereford and one grade of the same breed. He took first and second at the Marion county fair, and came to the state fair to take second in the calf-breeding contest, third in the fat Hereford grade class, and first in the fat pure-bred Herefords.

"This is the first year the boys have been able to do this," said C. E. Bishop, state club leader, in referring to the prizes won by calf club steers in open contests. "It shows a big improvement in the care of the stock and in the quality of the calves. The boys are developing a better eye for stock, and they are buying stuff of better quality."

There were one hundred and eighteen exhibitors in the calf-feeding contest, and fifty received awards.

The farm bureaus of the state played a very important part in giving the needed local support to the calf feeding work. For instance, the Marshall county association paid the expenses of shipping the beeves to the fair and back, besides aiding in the selection and the care of the calves.

"We claim the best bunch of stickers in the state," asserted W. A. Buchanan, county agent of Marshall county. "We started the work this year with forty-seven head and finished with forty-four. Two of the three that did not finish were put out by disease or accident, so that the boys have just about a perfect record for finishing what they start."

Fourteen of the forty-four were brought to the state fair. Seven of these won places in the contest. The best two won sixth and seventh. All forty-four are to be in the Marshall county contest at the coming fair, where four hundred dollars in prizes has been offered in this class.

Harry Haddock, of Rhodes, who won sixth place at the state fair with Poncho Lad, is hoping to stay at the head of the Marshall county delegation at the coming fair. He has a victory last year to his credit, and a win this season will give him permanent possession of the Marshalltown Fair cup. One of the interesting features at that fair for the boys will be the giving of a prize for the best groomed and best shown calf.

The Marshall county section of the barns was one of the neatest and best looking of any at the fair. The boys had a good team-work system, and planned so that one boy was on duty every hour. The team-work idea carried even farther than that. Howard Richardson, of State Center, whose Broad Hooks took fifteenth place, broke his arm a few days before the fair, and could not make the trip. Henry Howard, another Marshall county boy, took charge of the yearling and showed him at the fair. So young Richardson will get his ribbon and his prize money, even if he missed the fun.

According to Mr. Buchanan, a good part of the responsibility for the good showing made by the Marshall county boys rests on the breeders of the county. Marshall county breeders have supported the club steadily, and practically every man has agreed to furnish one calf for the feeding club work. This gives the boys a chance to get stock of quality that would be impossible to secure in any other way.

Pigs were hardly the attraction that the baby beeves were, but the pig club members still managed to put on an exhibition that was well worth seeing. Seventy-one pigs were shown.

The competitions were only a part of the program for the boys' and girls' club members at the fair grounds. The boys' club camp had a regular daily schedule, somewhat suggestive of a military regime. The girls, at a camp with the attractive title of Pine Tree Lodge, had a similar and only slightly less vigorous daily schedule. One interesting sidelight on the perennial difference between the two groups was given in the posted programs for the day. On the boys' schedule was the significant notation: "6:50—Morning ablutions," which we presume the leader translated into boy language. With a confidence that may or may not have been misplaced, the girls' program took the high moral ground that a girl does not need to be told to wash her face, and so refused to mention the matter at all.

The boys and girls were given something better than a chance to see the fair in a haphazard fashion. Groups were formed under adult leaders to go thru certain buildings in search of definite information, and the trips were talked over on the return. The most ambitious sight-seeing trip was that which one hundred and thirty of the boys and girls took thru Des Moines.

The girls had less drama about their contests than the boys, but managed to draw some very attentive audiences for the demonstration team work. The Pottawattamie county team, from Council Bluffs, was awarded first place after the judges had watched over a dozen teams show their skill during four successive days. The Eddyville team, Wapello county, was second, and the Dayton team, Webster county, was third.

Perhaps the feature of the greatest educational value in the whole program was the stock and corn judging contests between teams from the different counties. Polk, Hamilton and Johnson counties won the first three places. Vernon Maple, of Orillia; N. Alfred Hill, of Williams, and Edward Menough, of Grimes, took the first three places for individual work.

Polk county's team was made up of Edward Menough, of Grimes, Merwin Smith, Des Moines, and De Wight Kinsey, of Grimes. On the individual scores, Menough took third; Smith, fifth; and Kinsey, eleventh.

Menough had competed before in judging contests, but it was the other boys' first attempt. Smith and Kinsey are seventeen and Menough a year older. All are farm-raised boys and all expect to go on to Ames for an agricultural education. The hundred and fifty dollar scholarship given to the third-place winner and the one hundred dollar scholarship to the fifth will help on that.

The Polk county team was the product of some severe preliminary competition and training. Eighteen boys attended the first try-out and seven of these survived the first eliminations. From these seven four were finally chosen. As preliminary practice for the fair this team spent three days and a half visiting Polk county breeders and cultivating the judging eye by practice.

The climax of the week for the boys and girls was a big parade that was staged on the race track Wednesday afternoon. Flags and banners and floats were in evidence and the more tractable of the beeves were led along by their proud owners. Every boy and girl who could find an animal to lead or a flag or a sign to carry was there.

The reason for the big attendance was disclosed early in the day when the gentleman who was recruiting for the parade stopped a group of boys who obviously had their own notions as to what constituted a good time.

"You'll show all those people what good work you have been doing," he said seductively. "It won't take long, and afterward you can get seats in the grandstand to watch the rest of the program."

Doubt still rested like a cloud on a good many youthful countenances. Lemonade stands, roller coasters and shows of many kinds still held a siren attraction. So the recruiting gentleman played his master stroke.

"I'd be awfully sorry not to get you boys in that movie," he remarked sadly. "You see, they're going to take pictures of the parade, and I should certainly hate to have you left out.

The boys instantly decided that they would hate it, too. So when the pageant lined up for the grand parade it held in its ranks not only the emblems of the work of the boys and girls, not only beeves and pigs and canning outfits, and other concrete evidences of accomplishment, but also in person some hundreds of the representatives of the state's greatest resource and its greatest hope.

The attitude of the average boy to the club work was well typified by one lad who was trying to lead a steer out of one of the barns. The steer weighed about twelve hundred and was rather restless. The boy weighed around sixty pounds. So every time the steer tossed his head the boy was jerked from side to side in a very breathless fashion.

"Next year," said the boy between gasps, "I'm going to be bigger and I won't be dragged around like this.

He set his heels in the ground and pulled. "Come on, your ornery critter!" he said reproachfully to the calf, and added to the spectator: "No, that won't do any good either. I'll be bigger myself next year but then I'm going to have a lots bigger calf."

With the parade of all the live stock shown at the fair, on the track in front of the amphitheater, the stock show of the Iowa State Fair came to a glorious finish. Fair officials estimated the value of the live stock in the parade this year as over two million dollars, as compared with one million for the previous year. These figures give a fair idea of the class of the stock on exhibition at the Iowa classic. Certain it is that state fair goers have never seen a better stock show than was witnessed during the past week. In one or two divisions only the show did not surpass former years, but even in these instances the show this year was at least as good as has ever been held here.

It was largely an Iowa show throughout. This was especially true in the swine division, where the majority of the exhibitors were Iowa breeders. There were enough good herds from without the state to enhance competition and to increase the honors due the prize winners. The Iowa special and amateur classes increased the incentive for the Iowa breeders, and no doubt brought out many exhibitors who otherwise would have missed the good fellowship and experience that can be gained in no other way than by taking out a show herd. Many Iowa herds were out for the first time. This is one of the most gratifying of the many gratifying things about this year's show, for the newcomers gave the veterans stiff competition all the way, and even won some grand championships.

The swine show, with a record list of entries, attracted large crowds at all times, making such a large overflow into the ring as to make the judging extremely difficult. The ringside crowds in the big live stock pavilion were also large, and would have hindered the work of the judges were it not for the precautions taken by the fair officials. Seats in the pavilion were at a premium, this being an excellent demonstration of the widespread general interest taken in the live stock business at this time. Interest seemed to be quite evenly divided among the various breeds, the cattle drawing perhaps the largest crowd, even though they were placed in the afternoons when they had to compete with the races.

The spectators were agreeably surprised by the excellence of the horse show, it being generally excepted by many people that this department would be weak. Although there have been larger horse shows at this fair, there has never been a better one. The big Iowa breeders were out in force, and in addition there were Iowans who are new in the show ring, and some strong studs from Illinois. The strength of the Belgian exhibit was the feature of the show, and showed the increasing popularity of this breed.

Everything combined to make the show a success. The rapidity with which the judges made their decisions is shown by the fact that the judging was completed by Thursday evening. Satisfaction with the work of the judges was practically universal. They knew the type desired and adhered to it. The prize money was well distributed, the competition being so keen that no one firm had a monopoly on the ribbons, and every competitor received some incentive to return. And, lastly, the interest of the public in the work of the breeders was so great that one could not but realize that the farmers of the state know of the improvement being wrought thru the efforts of the breeders and are grateful.

THE BEEF CATTLE SHOW.

The show of beef breeds was particularly strong, drawing good crowds and having a considerably greater number of entries than the dairy breeds. The Shorthorns made the strongest showing in numbers, having 200 cattle on the grounds, as compared with 153 for the Herefords and 92 for the Angus. The Angus and Herefords had more really outstanding animals in the show than the Shorthorns, however, and in this respect were stronger. The Herefords made a flashy show, with many of the most noted herds in the country represented. It was not as strong an Iowa show as the other breeds made, however, and for this reason did not attract as much general interest.

IOWA AMATEUR STOCK SHOW.

In order to increase the interest in the breeding and showing of purebred live stock, the fair association this year instituted the amateur classes. These classes were open only to those men who have never shown before, either at the Iowa fair or a national show. The results showed the value of the show, for some large classes were brought out, and some animals which placed high in the open classes were shown by those showing for the first time. The Shorthorns were the strongest in this show, with the Angus second and Herefords third.

THE DAIRY CATTLE SHOW.

Three hundred and thirty-five dairy cattle made this part of the show second in importance only to the beef show. The Holsteins had the greatest number of cattle of the dairy breeds, with 134, followed by the Jerseys, with 53, and the Guernseys, with 51. The Iowa entries made good showings, altho there were some strong herds from without the state. In most of the classes the awards were evenly divided, altho in one or two of the breeds, one firm seemed to dominate the show. Substantial gains in number of animals shown and number of exhibitors over last year indicate a healthy condition among the dairy breeds.

THE DRAFT HORSE SHOW.

Although there have been larger horse shows at the fair than this year, it is doubtful if there have been any with a better class of stock shown. The Iowa breeders were out in force, and in addition some of the strong strings from Illinois added to the competition. An improvement in the show over last year was noticeable, although it was to be expected that the Victory fair would surpass last year's. The strong showing of the Belgians was the feature of the show. This breed provided an exhibit that compared with the Percherons for numbers, and was of exceptional quality. The Percherons had the largest show, with the Belgians second.

THE SWINE SHOW.

"What a hog show!" was the most common expression heard about the swine pavilion. The show stood out like many other features of the fair, a record-breaker. Approximately 3,200 head of swine were on the grounds, compared with approximately 2,300 head shown last year. It was seen in the early stages of the fair that there would not be room in the large pavilion, so dozens of pens were arranged for in the cattle barns and under tents. The majority of the breeders came from Iowa, although the neighboring states were represented with some very high-class herds. Quality was not sacrificed for numbers. It was the general comment that the quality of the show as a whole was equal to any held in the past, and in many cases decidedly superior. In point of numbers, the Duroc Jerseys led, with the Poland Chinas second. The Berkshires staged a great come-back this year, for where only two boars were on the grounds last year, there were five good herds shown this year. The minor breeds made a very creditable quality show, this being especially true of the Yorkshire and Tamworth breeds. The condition of the hog trade was noticeably healthy. Some of the deals made by speculators on animals would rival some of the land deals. Individuals changed hands three and four times at very material advances. There were many buyers, and those having stuff to sell had little trouble making disposals.

Type ran very uniform in all breeds, and the big type, with arched backs, even lines and possessed of lots of bone and strength of pasterns, were predominant. It was a big type show all through.

Great interest centered in the judging, as usual, but it was a noticeable fact that interest seemed to center the strongest around the Poland show. This ring was crowded three deep all the time, even so as to make the judging extremely difficult. It is seldom that the judging gets off as smoothly as it did this year. Every judge knew what he was looking for, and as a rule the crowd agreed. Most of the judges were forced to work under great difficulties because of the crowded conditions, yet they did a good job.

The exhibition made this year was a credit to the fair and to the state of Iowa. It will probably stand as a record-breaker—at least, it will take a good one in the future to surpass it. The count in the pens showed a total of 3,200, compared with 2,500 in 1918 and 2,492 in 1917.

THE SHEEP SHOW.

The sheep exhibit this year was approximately one-third stronger than in 1918, there being 887 sheep on the grounds. In numbers, the Shropshires led, with the Oxfords second and Cotswolds third. The mutton breeds predominated over the wool breeds in the ratio of about seven to one. It was mostly an Iowa show, with Wisconsin making a strong showing. The Iowa State College had a strong exhibit, winning the flocks where they were represented, and having the champion Southdown ewe. Harry Eddingfield, of Mt. Pleasant, Iowa, won the prizes for champion ram and champion ewe, Iowa bred on his Shropshires. Jones & Son, Everly, Iowa, repeated their 1918 winnings when they won the prize for champion Shropshire ram on Broughton's 2552, a ram of good type, fine masculinity, a clear fleece and skin.

Much attention was given the shearing and trimming contest for both hand and machine work. The points on which the contest was decided were quickness and quality of work.

Although the fine wool show was held in a poor location, it drew much favorable mention, and an effort will be made to hold the show in a more favorable location next year. It was the best fine wool show ever seen at this fair.

Wm. Renk, of Sun Prairie, Wis., judged the mutton sheep, to the satisfaction of the exhibitors, and Carlos J. Fawcett judged the wool sheep and wool exhibits.

THE BIGGEST AND BEST IOWA STATE FAIR.

From The Homestead, Des Moines, Iowa.

No state fair has ever been held anywhere in the world that was equal in importance and value to the Iowa State Fair held at Des Moines last week. It was an exposition of which the management had reason to be proud. It was a farmers' fair from start to finish. It was planned for Iowa farmers, their wives and families, and it was attended by them. It was not a Des Moines fair. While Des Moines people gave the big institution generous support, it was the farmers who swelled the attendance nearly 82,000 above the record of last year. There were two days on which the attendance surpassed the record of 68,000, made on Thursday last year. On Tuesday this year the attendance was 76,406 and on Wednesday 73,109. The total attendance for the 10 days was 408,185 this year as compared with 324,377 last year. Gate and concession receipts were equally gratifying, the total, as given out by the management, was $320,244 as compared with $251,196 last year.

The fair was well attended last year, but with the boys in the service of Uncle Sam and many of them in France and a consequent scarcity of labor on the farms, the inclination to stay at home was strong. This year, with most of the boys back home, everybody seemed to be in the mood to celebrate and the result was the record breaking attendance mentioned. There was also much evidence of prosperity on every hand. Concessionaires everywhere remarked that never had they seen visotors spend money so freely. The fact that sandwiches and lemonade cost twice as much as they did in former days did not cut down the sales. On the contrary everybody seemed to buy more freely than ever. The restaurants all made good money and the side shows were liberally patronized. The grandstand and the bleachers were filled to overflowing every day. The grandstand has a seating capacity of 7,000 and the bleachers 5,000, or a total capacity of 12,000, and on several nights 13,000 people sat on the grass in front of the bleachers, which shows how the fair is growing and also that there is no lack of interest in the splendid performances the management puts on from year to year. This year's battle of Chateau Thierry was a phenomenal success.

The fair was a success in every sense of the word. Not a single accident occurred on the grounds during the ten days it was in progress and not a person was heard to complain. The judging of the thousands of animals that went through the ring was done without a hitch, without a single complaint from anybody. Secretary A. R. Corey and President C. E. Cameron deserve the thanks of every Iowa farmer and the public in general for their splendid management of this great institution which did a business of nearly a third of a million dollars in ten days. It takes a lot of executive ability to run an institution of that sort.

The last legislature appropriated $150,000 for the erection of a large cattle barn. The amount asked for by the fair management was $200,000 and it is unfortunate that the appropriation was cut down, for a building large enough to accommodate the cattle cannot be built for the smaller sum. The plans for the new building call for a structure 350 by 480 feet and cannot be built for less than $200,000.

Iowa lawmakers do not seem to fully realize the importance of Iowa agriculture; if they did they surely would provide more liberally for the state fair, the most important single educational institution in the state for men actively engaged in farming. The benefits which the state annually receives from this great fair are vast; they cannot be measured in coin. The fair management should be treated more liberally in the future than they have been in the past. It is a fact that the Iowa State Fair has come more nearly financing itself than any other state fair in the country. Aside from paying all running expenses, it has put as much money into permanent improvements as the state has provided—an achievement which no other state fair, that has developed as rapidly as the Iowa fair, has accomplished. The investment in buildings and other improvements on the fair grounds is now so great that the time has come when the state should set aside a permanent fund for up-keep of the whole plant.

For the last 15 years the Iowa State Fair has earned an average annual net profit over and above all running expenses of $33,000 and this money has been used for permanent improvements. This year there will undoubtedly be a net profit of over $50,000.

The keen demand that exists for live stock was clearly reflected at the fair this year. In the first place there were about 300 more cattle on exhibition than last year. The Shorthorns led with 200 head; they were followed by the Herefords with 153 head. The Holsteins far outnumbered former records with a total of 134 head. The cattle were all in excellent show condition and it was noticeable that more interest was manifested in the judging than usual, and also that men studied the cattle in their stalls with greater earnestness than ever. Many a farmer who has never used a registered bull in his herd before is now sriously debating the question of buying one to improve his herd. High priced land and expensive feed are forcing improvement in live stock, so to speak.

The outstanding feature of the cattle show was the baby beef feeding contest for which 174 calves were entered. Of these 156 appeared in the show ring. The judging of these calves by Prof. J. W. Kennedy, of Sioux City, Iowa, on Saturday was a notable event. The calves filled the entire judging ring, each accompanied by the boy who had done the feeding and kept a close record of the amount of feed consumed and the cost thereof. Each boy was able to tell when he came to the fair what it had cost him to produce 100 pounds of beef. The boys were therefore in position to compare notes and study the work of each other. The lesson which those who entered calves in this test learned was one that cannot be measured in dollars and cents. Every boy who did not get as high a prize as he thought he ought to have had, and all those who did not get within the money went home with a determination to do better next year. Some learned that they had not selected the right kind of calves to get to the top; others that they had not fed the best and most economical rations to make beef economically; and still others realized that they had not paid enough attention to regularity in feeding. When they talked with some of the boys who had been more successful and who had paid very close attention to the points which some had considered negligible they realized in a way that they will never forget how to do better next year. The surest way to learn anything is to learn by doing. When practical work is supplemented by reading and talking with other people, progress is sure to be made. The boys and girls of today will be the farmers and farmers' wives of tomorrow and the club work that is progressing so splendidly all over the state will result in an immense amount of good in years to come.

As President Cameron of the State Board of Agriculture saw the 156 boys in the judging ring holding their calves he remarked, "These are the boys who in a few years will support and manage this fair and the training which they are now receiving augurs well for the future of this big institution, which is now only well started on the road of its greatest usefulness." How true that statement is! The future of agriculture is in the hands of the children of today and the better they are trained for their work the better it will be for the country as a whole.

The hog show was the biggest and the best that has ever been seen at any fair and exposition in the world. The big swine pavilion proved entirely inadequate for housing the entries. Two large tents were erected to care for the overflow and they held no less than 500 head, the total number on exhibition being 3,500. Additional comments on the hog show will be found elsewhere in this report.

The horse show was very good but not quite so large as it has been in former years. The Belgian show was perhaps the strongest of the draft breeds, although in numbers it led the Percheron breed by only one head. Draft horse breeding has been on the decline during the last couple of years, but those who are staying by the business are bound to reap their reward in the future. Already the let-up in breeding is becoming noticeable in diminishing supplies and better prices are bound to return in a year or so. This, at least, is the consensus of opinion among the best posted horsemen of the country.

Our big state fairs are often spoken of as among our most important educational institutions. By many they are regarded as places where practical post graduate courses are offered, because they are of such great value in demonstrating the agricultural resources of a state and the manner in which farming is progressing. If it were not for our big state fairs it would be impossible for farmers of the country to keep in close and intimate touch with the rapid progress that is being made in every department of agriculture. Farming is changing so rapidly as compared with even a quarter of a century ago, that it seems almost incredible. The automobile is everywhere. The tractor and the truck are being introduced as rapidly as the so-called pleasure car was a few years ago, and before long these two sources of mechanical power will appear as essential to the progressive farmer as the automobile does today. He will not know how to get along without them. The Iowa fair this year was exceptionally strong along educational lines and it was evident on every hand that the farmers realized and appreciated this fact.

Monday, August 25th, was farm bureau day. On that day the officers of the Iowa farm bureaus met to discuss questions of special interest to the state as a whole. Every county farm bureau in Iowa, and that means 100, is now a part of the State Federation of Farm Bureaus. Seven hundred farm bureau officers and county agents were present at this meeting.

S. L. Strivings, president of the New York Farm Bureau Federation, delivered a splendid address during the afternoon. He outlined what he considered the work which the state farm bureau federations, and the national federation to be organized this fall, should undertake. It was his opinion that the work should first be educational, and second that it should also concern itself with legislative matters of general interest.

In explaining the educational part of the work he stated that it should be the business of the state and federal organizations to educate the consumers, while that of the county bureaus should be to educate the producers, and that all farm bureau organizations—that is, the county bureaus, the state federations and the federal organization—should interest themselves in local, state and national legislation. The national federation should naturally concern itself with the broader questions that affect all; the state federations should take up matters pertaining to state laws; while the county bureaus should see to it that men favorable to the measures which the farm bureaus desire to have enacted into laws are elected.

The members expressed themselves as not in favor of the Kenyon and Aldrich bills in their present form. They were inclined to be lenient with the packers, but it was the sense of the meeting that something should be done to correct present abuses by the packers and that the live stock market should be stabilized in some way. It was suggested that it might be a good plan to have a committee appointed, composed of two practical farmers who operate their own farms, two consumers and one representative from the federal bureau of markets or the packers. It was the sense of the meeting, as stated before, that the packers should be regulated, but it should be done in such a way as not to seriously affect the live stock market. Government operation of the packing houses and stock yards was not favored.

The matter of raising money for the state and national federation was discussed and it was decided to put on a campaign to raise $250,000 for these two organizations. At present the farm bureaus of Iowa have a membership of 50,000 and it is confidently expected that this will be raised to 150,000 by the first of next year, because it seems only to be necessary to explain the work of the farm bureau to the farmers to get them to join. In counties where active campaigns have been put on, fully 95 per cent, and sometimes more, of the farmers solicited have joined. In no county have all the farmers been solicited to join, but they will be this fall.

The Iowa State College, in co-operation with the Polk County Cow Testing Association, put on an exhibit of dairy cows in a tent that attracted a great deal of attention. Some of the cows were furnished by the college and others by the Polk County Cow Testing Association. In front of the entrance to this tent was a rather striking arrangement of milk cans and butter tubs. On one side of the door stood 41 10-gallon cans, representing the amount of milk produced by a scrub cow in one year—not a theoretical but an actual cow—and the exhibit would have been still more impressive had the cow been standing beside it. In addition to the 41 cans there were three 60-pound butter tubs, showing the approximate quantity of butter produced by that same scrub cow in a year. The actual products which this exhibit represented were 3,543 pounds milk and 190 pounds butter. It isn't every scrub cow that produces as good a yield as this, but, as stated before, it did not represent the average cow but the products of a particular scrub cow that was well cared for at the Iowa State College.

On the other side of the door there were 98 10-gallon cans and six 60-pound butter tubs, representing the products—8,466 pounds milk and 350 pounds butter fat—produced by a granddaughter of the scrub cow just mentioned. This improvement in production was the direct result of the use of registered sires for grading-up purposes. It showed vividly that by breeding a scrub cow to a registered sire, and then breeding her progeny to another registered sire the production of the latter was increased over 100 per cent. It was a lesson that we hope went home to a great many farmers who are still using scrub sires and whose herds, as a result, are no better today than they were 20 or 30 years ago. Whereas, by the use of registered sires it is possible within five or six years to double the producing capacity of a herd of dairy cows.

Inside this tent, as mentioned before, were a number of cows further emphasizing the importance of breeding and of selection in building up productive herds. Four cows in particular illustrated that breeding alone is not sufficient to make substantial improvement in a herd of cattle, but that it must be accompanied by careful selection. In other words, it taught the lesson that all grades, and this applies with equal force to pure-breds, are not equal. The mere fact that an animal has a pedigree is not all-sufficient in itself. There are so-called scrub grades as well as scrub pure-breds and it is these scrubs that must be eliminated if substantial and rapid improvement is to be effected.

Two cows, daughters of the same sire and out of half sisters, stood side by side. They had produced, as two-year-olds, as follows: one, 9,911 pounds milk and 459 pounds butter fat, and the other 5,366 pounds milk and 264 pounds butter fat. There was, therefore, a difference of nearly 100 per cent in the productive capacity of these two daughters of the same sire. Two other cows stood next to these. They were daughters of the same cow. As three-year-olds their records were as follows: one had produced 9,508 pounds milk and 420 pounds fat, and the other 5,116 pounds milk and 249 pounds fat. Here, again, one of these cows produced nearly 100 per cent more than the other. The lesson taught by these four cows, each two of which were similarly bred, was that careful selection must accompany good breeding in order to obtain desired results. The poor producers must be weeded out and the better ones retained in the herd for breeding purposes.

Two other cows—a halfblood Holstein, three years old, had produced 4,594 pounds milk and 209 pounds fat in a year. A three-quarter-blood Holstein, also a three-year-old, had produced 8,466 pounds milk and 356 pounds fat, illustrating again the value of continued improvement. Placards called attention to the fact that milk scales and the Babcock test are the best and most impartial judges of the productive capacity of a cow. You cannot tell by the looks of a cow whether she is a good producer or not. In other words, the selection must not be based upon physical characteristics, but upon actual results at the pail as measured by the scales and the test.

Elsewhere on the grounds were some figures bearing upon this same subject. It was shown that as a result of four years of testing 10 herds of the Cedar Valley Cow-Testing Association, milk production was increased 45 per cent and fat production 35 per cent. There has never been a live cow-testing association that did not very materially improve the herds under test, because of the weeding out of the poorer individuals from the herd and of finding the better individuals and from them saving the best heifers for replenishing the herd.

The value of liberal feeding was illustrated in still another place. A cow that had been stinted on feed produced 2,742 pounds milk and 131 pounds fat in one year. Another cow, very similar in appearance to the cow just mentioned, but which had been liberally fed, produced 5,558 pounds milk and 245 pounds fat. There was an increase in this case of 103 per cent in the quantity of milk and 87 per cent in the quantity of fat from liberal feeding. The net profit obtained from a liberally fed cow was also much greater than that from the cow that was stinted on feed.

One of the exhibits in the state college building which didn't show anything particularly new attracted a great deal of attention. It was an exhibit that called attention to the fact that milk and cream can be cooled with well water to 45 or 50 degrees Fahrenheit, as that is the temperature of Iowa well water when it comes fresh from the pump. The exhibit showed a wooden tank placed between the pump and stock watering tank, so arranged that all water pumped ran through this cooling tank before reaching stock tanks. As stated, this scheme is not a new one by any means. It is one that has been practiced by the better farmers for 50 years or more. Nevertheless, it is a practice that is not in common use. In fact, not over 10 per cent of the men who sell cream are provided with cooling tanks. When sour cream is delivered to the creamery, first-class butter cannot be produced from it. Cream must be sweet when it reaches the creamery if high-class butter is to be manufactured.

That there is a decided difference in the quality of butter made from cream that is sweet when it is delivered to the creamery as compared with that which is sour when delivered, has been demonstrated by several creameries where these cooling tanks have been installed on the farm of every patron. Last year, for example, 2,000 patrons of Iowa cooperative creameries furnished sweet cream to their creameries and as a result these creameries were able to pay three cents more for butter fat because they could market their product at a higher price. If by this simple process of cooling the cream with well water the farmer can get three cents more a pound for his butter fat it is certainly a practice well worth following.

The matter of spraying farm orchards has been discussed in season and out of season by the farm press for many years and yet very little spraying is being done. Farmers continue to allow insects and fungus diseases to ruin their fruit whereas with a little extra work and money spent for chemicals they could produce as choice fruit as is produced anywhere in the world. The difference in the appearance of apples from unsprayed and sprayed trees was illustrated in an exhibit put on by the State College and it was very striking. Some facts in regard to the value of spraying were given by F. M. Harrington in charge of this exhibit. He stated that last year spraying tests were made in seven orchards. A total of 2,940 trees were sprayed and the crop harvested was compared with that from trees left unsprayed. The average yield from the sprayed trees was seven bushels and from the unsprayed trees 2.5 bushel per tree. The sprayed fruit sold for $1.75 a bushel and the unsprayed to $1 a bushel. The cost of spraying, including the chemicals used, all the labor connected with the work, interest on the investment in a spraying outfit, was only 53 cents per tree. Thus there was a net gain from spraying amounting to $9.20 per tree, and a total net gain from the spraying of the 2,940 trees of $27,048. Can you afford not to spray under such conditions? This demonstration certainly argued that it is a shameful waste to allow apple trees to go unsprayed, and what applies to apple trees applies with equal force to other fruits.

The grain grading exhibit, put on by the United States Department of Agriculture, was of great practical value to those who saw it. Ralph C. Wright, federal grain supervisor at Minneapolis, who was in charge of the exhibit showed hundreds of farmers how, under the new federal grain grading rules, wheat and other grains are tested in determining the grade. Most of his work was confined to the weight per bushel of wheat. He had a test kettle and other apparatus at hand and showed the farmers how to obtain the correct weight. He explained that the wheat to be tested must be put into a funnel, the bottom of which is just two inches above the top of the kettle. The bottom of the funnel must have an opening one and one-fourth inches in diameter. From this funnel the wheat must be allowed to run as fast as it can through this opening into the kettle and the kettle must be allowed to overflow. Then the top must be struck off with a piece of wood having a round edge and it must be struck off with three strokes, each one covering part of the bucket. Striking off the grain with one stroke of the sharp scale beam, as is usually done at country elevators is not permissible for the reason that it gives too low a weight. Improperly striking off the top of the kettle may lower the weight per bushel as much as one pound.

Another thing to which Mr. Wright called attention in his demonstrations was that in sampling a load the wheat should never be taken from the top because when a load of wheat has been hauled from five to eight miles over country roads the heavier kernels have settled to the bottom and the lighter ones have been crowded to the top; therefore, if the test is made from the top wheat it will not properly represent the entire load. The sample should be taken from about three places in a load with a regular sampler that can be shoved clear to the bottom of the wagonbox.

The new Iowa Fleece Wool Growers' Association showed its business acumen by being on the grounds with a splendid exhibit of wool samples illustrating how wool is graded before it is sold to the woolen mills. The more important grades of wool were shown and the approximate price of each, based on the present market, indicated so that any one interested could get a fair idea of the difference in good and poor wool. Attention was also called in this exhibit to the wide difference there is in the shrink of wool. Some of the fine wools that carry a good deal of oil shrink as much as 67 per cent in scouring, while medium wools shrink from 40 to 50 per cent.

The exhibit was in charge of Carlos Fawcett who has represented the Iowa wool growers this fall in Chicago on the floor of the warehouse of the commission company that is selling and grading the clip for the association. The man who was active in getting this exhibit put on was J. D. Rittgers, Dallas Center, Iowa. The Iowa Fleece Wool Growers' Association now has a membership of 3,500 and has marketed approximately one million pounds of wool this year or one-fifth of Iowa's clip. When it becomes known how much more the association members have received for their wool than those who sold as individuals in the old way, all Iowa wool growers will immediately become anxious to join.

The county exhibits in the Horticultural and Agriculture Building this year were outstanding. Never before has the Iowa State Fair shown such well arranged and well planned county exhibits as were exhibited this year. No less than 14 counties were represented and they occupied nearly the entire east side of the building. In addition to these county displays there were 14 individual farm exhibits that could not have been improved upon. For the purpose of comparing the county exhibits to the best advantage the state was divided into four sections—northern, north central, south central and southern. Winnebago county received first place in the northern section; Grundy first in the north central section; Guthrie first in the south central section; and Keokuk first in the southern section. Keokuk county also won sweepstakes for the highest scoring exhibit, and Guthrie county won first for the most attractive and best decorated exhibit.

The county exhibits were in charge of J. W. Coverdale, secretary of the Iowa Farm Bureau Federation, who deserves great credit for the manner in which he handled both the county and individual farm exhibits this year. They were educational in every sense of the word and one of the most pleasing features in the building.

The fruit show was about the same as usual, but the vegetable show was light due to dry weather.

The machinery exhibit was unusually large this year and it would have been much larger if more exhibition space could have been furnished by the fair management. One of the outstanding features of the machinery show was the number of electric farm lighting plants on exhibition. Eight or nine different plants were shown and if one were to judge by the number shown and their apparent efficiency it will not be long before the great majority of Iowa farm homes will be lighted by electricity and many household tasks will be performed by electrical power. What this will mean in comfort and satisfaction to the women folks cannot be estimated in dollars and cents.

There were also a large number of tractors and all sorts of tractor machinery on the grounds and the keen interest manifested in this machinery was apparent wherever a tractor was shown. "I have owned one of these tractors for three years," remarked one farmer to another, as they examined the machine in front of them, "and I want to say to you that I would quit farming if I had to give up my tractor. It is especially valuable for early fall plowing, which is so necessary for best results." Similar conversations could be heard scores of times every day.

The display of motor trucks was also large; especially were pneumatic tired trucks in evidence. It has been demonstrated that pneumatic tired trucks are much better adapted for country roads than those with solid tires as they can go anywhere a wagon can without getting stuck. Truck salesmen declared that they made many sales to farmers and without much work on their part.

Silos were in greater evidence than ever as was also silage cutters and accessories for silo filling. One machine that cuts the standing corn into inch lengths in the field was exhibited. This is a machine that was invented about three years ago and has recently been purchased by one of the large machinery manufacturers and will undoubtedly soon be on the market in quantities.

The Boys' and Girls' Club work in Iowa is reaching important proportions. State club leader, E. C. Bishop, Ames, Iowa, says that there are now 20,000 boys and girls enrolled in club work in Iowa. They are doing all sorts of work—feeding cattle, raising pigs, caring for poultry, sewing, cooking, canning, raising corn and other crops, etc., and great benefit is resulting from their efforts. The club members are becoming intensely interested in farming as a business because they are learning the difference between good and poor management and are seeing how the farm can be made more profitable. Boys' and girls' club work, more than any other one factor, is keeping the children from moving from the farm to the city. The various boys' and girls' exhibits at the fair this year were marvelously successful and instructive. In the building devoted to these exhibits, for example, there were 2,000 jars of canned fruits, vegetables and meats. The demonstrations that were held by the various clubs created much enthusiasm in the work, as was evidenced by the large crowds that visited these demonstrations from day to day. They seemed never to tire of the stories which the girls had to tell about their canning work. The same was true of the boys' exhibits, particularly the baby beef contest.

BEEF CATTLE.

Iowa State Fair visitors witnessed the largest and best beef cattle show that has ever been put on in Iowa. All the beef breeds except the Galloways were represented. There was a large number of amateur exhibitors, which goes to show that the pure-bred beef cattle business is on the increase. It was also very gratifying to find some of these amateur breeders carrying away a few of the blue and red ribbons in competition in the open classes with some of the older experienced breeders. The cattle were all well fitted and there were few of the plainer sort. Some of the classes had as high as 30 entries and the judge had to spend much time comparing the animals before he felt justified in lining them up for the ribbon man to hand out the colors. According to the official count there were 200 Shorthorns, 153 Herefords, 92 Angus and 11 Polled Shorthorns on the state fair grounds. Of the dual-purpose breeds there were 66 head of Red Polls and 17 head of Milking Shorthorns.

A few years ago a large percentage of the blue and red ribbons were invariably won by the older experienced breeders and showmen, but not so any more. During the past few years it is not unusual for some young breeder who started right by buying a few first-class individuals of the best recognized blood lines, to appear at the state fair with one or more outstanding individuals and take away a first and now and then a championship. Breeders are striving harder every year for a high place among the winners in their particular breed because of the recognized effect Iowa State Fair winnings have upon future sale prices. It is quite generally recognized that the Iowa State Fair has a live-stock exhibit superior to that of any fair in the United States.

BOYS' AND GIRLS' BABY BEEF SHOW.

There were 156 baby beeves in this year's baby beef show, entered by boys or girls between the ages of 10 and 19 years. These young farmers purchased their calves last fall and began feeding them and keeping records of the amount and kinds of feed fed and the gains made. Complete records of their feeding operations were required to be submitted to the state club leader at Ames and the boys were given a grade on the efficiency of their feeding operations. In most cases the county agent in each county having a baby beef club leader organized the county club and assisted the boys who needed help in securing a satisfactory calf to feed. In practically every instance the local county fair association introduced special baby beef classes for the young feeders to encourage them to take good care of their calves and exhibit them at their home fair.

To one who has not been following the junior club work being carried on in Iowa, a walk through the Baby Beef Club barn was an eye opener. The knowledge which these young farm boys and girls have acquired in the art of feeding and fitting baby beeves for show is nothing short of marvelous. One of the most interesting times to observe these young herdsmen was when they were competing with one another in the show ring. From their keen observation of the older, more experienced herdsmen they have learned the art of showing their calves to the best advantage. For example, they have learned how to keep their calves standing square on their feet, how to make them show a straight top line, how to hold their head to cover up possible hollowness behind the shoulders, etc.

On Thursday afternoon the calves were sold at public action to the highest bidder. The sale this year was the most satisfactory and pleasing to the boys of any sale that has been held on the Iowa State Fair grounds. Most of the calves sold at around $20 a hundredweight. Buyers from Armour & Company, Swift & Company, Wilson & Company, the Morrell Packing Company and the Iowa Packing Company were spirited bidders. Black Beauty, a salf owned, fed and shown by Elva Probst, of West Liberty, Iowa, brought the highest price. The auctioneer's hammer dropped on John Morrell Company's bid of $28 per hundredweight. The calf weighed 1,060 pounds, which at $28 brought its young owner $296.80. Out of gratitude to the auctioneers who willingly donated their services to help sell the calves, after the sale was over the boys and girls got up a purse of $20 and presented it to the men as an expression of appreciation of their good work.

DAIRY CATTLE.

Except for the annual Waterloo Dairy Cattle Congress, visitors at the Iowa State Fair had the opportunity to see the biggest and finest exhibit of dairy cattle ever shown in the state. Three hundred and eighteen head representing the five leading dairy breeds were carefully groomed and fitted for the judge's discerning eye. Although the herds came from several different states, Iowa was sufficiently represented to show that she has enough foundation herds to maintain her reputation as one of the foremost dairy states. Holsteins were present in the largest numbers but it would be hard to say which of the five breeds showed the best general high quality. All the breeds were represented by some rather inferior animals but as a whole they stood for a type which most breeders are striving for.

The Holstein men entered 134 animals, the Guernsey breeders 51, the Jersey enthusiasts 53, the Ayrshire fanciers 31, and the Brown Swiss men 49 head. Three different judges passed on the merits of the dairy breeds and the exhibitors seemed to be very well satisfied with the placings that were made.

HORSES.

There was a total of 336 exhibits in the four leading breeds of draft horses at the state fair. Forty-four Iowa breeders were represented in the draft division. Illinois contributed five of its leading studs. Nebraska, Minnesota and Wisconsin horsemen sent a few entries, and one breeder from Saskatchewan, Canada, was present. Superintendent Curtiss declared the exhibits as a whole were up to the average for Iowa, although not in any way extraordinary. Belgians numbered 74, Percherons totaled 73, Shires had 64 entries, and Clydesdales were represented by 54 head. With nine entries in the ring for the aged mare class, the Shire breeders made the best single class showing of any of the breeds represented in the horse division. The Percherons, with five entries for aged stallions, presented the best quantity showing for that breed. Percherons, Belgians, Clydes and Shires staged some interesting special futurity events for stallion and filly foals. Considerable interest and educational value was attached to the entries in Class 5, draft geldings and mares, which was limited to Iowa farmers except in the open classes.

SWINE.

Iowa has this year set a record for the nation in the matter of great swine expositions. No hog exhibition ever held in the Middle West, and that means anywhere ever beat the one that the Hawkeye state put across without any apparent effort last week. The mammoth swine pavilion overflowed and several tents and barns had to be pre-empted by the swine men. Hitherto there has been ample room for most of the swine exhibits in the space provided, consisting of about 1,425 pens, but this year all records were smashed and as load after load of promising porkers came into the yards the officials of the swine division were put to their last resources to find accommodations. When the official count was made on Thursday it was found that there were about 3,200 hogs on the grounds—twice the average for a show of this kind and a third greater than the total for 1918. Indeed, the great National Swine Show to be held at Des Moines this month will do well if it affords a more overwhelming testimonial to the merits of the bred-for-production hog than our state fair just closed has done.

Every breed of profitable, big-bone, modern-scale hog was represented at the show with individuals and groups that would be hard to outclass in any sort of select company. The Durocs and the Polands were close contenders for premier honors in point of numbers at the show, although the former probably came out a bit in the lead, having a total of over 900 animals in pens. The Poland Chinas were represented by 865 head. Chesters numbered 633, Hampshires 390, Spotted Polands 143, Berkshires 76, Tamworths 47, Yorkshires 41, Mulefoots 21, and the boys' and girls' amateur entries were 78, making the grand total well up toward 3,200—a record that no state fair in the country will be apt to beat for some time.

Harmony and satisfaction was prevailingly evident at the show, and the decisions of the judges without exception proved pleasing to spectators as well as exhibitors, as the type each judge had in mind seemed quite in line with the accepted standards for the various breeds.

The Duroc Jersey, the Chester White and the Poland China rings were naturally the most crowded with interested visitors during the progress of the awards, owing to the predominance of those breeds in Iowa. Much growth is evident, however, in the strength of the Hampshire and Spotted Poland breeds and their devotees are ever increasing with the wider demand for profitable production of pork. Some fine, clean, large-type Yorkshires and a few pens of choice Tamworths lent variety to the show. The Berkshire men also led some very excellent animals ringward. Officials of the Poland, Chester White and Duroc Jersey breed headquarters were on hand at the show and without exception they marveled much at the extent of Iowa's progress in swine husbandry as reflected in the number of swine shown and the increasing interest evident among the fair visitors. Secretary Carmichael of the National Swine Show was also present and expressed gratification over the quantity and quality of the entries. Altogether, it was the biggest swine week that Iowa has ever seen, with this fact foremost, that the entries were of the real kind that make good under average farm conditions because of their inherent qualities of size, bone and substance now being insisted upon for economy's sake.

SHEEP.

The sheep show was a very strong one, both from the standpoint of size and quality of the entries. There were 784 sheep on the grounds. As usual, the Shropshires led, this time with 275 head; they were followed by the Oxfords with 121 head and the Cotswolds with 93 head.

The other breeds were represented by from six to 72 head each. There was much interest manifested in both the sheep show and the wool exhibit. Iowa farmers are just beginning to realize that the sheep business will be much more profitable when they all join hands in marketing their wool. Approximately one-fifth of Iowa's clip has this year been marketed through the Iowa Fleece Wool Growers' Association, a cooperative marketing organization. If the wool producers of this state know what is best for them they will all join this association next year and sell 100 per cent of their crop through their own organization. In that way, and in that way only, will they be able to obtain a fair price for their wool. So long as the sheep men are dependent upon local wool buyers for a market the sheep business will not be satisfactory to the producer.

FINANCES

The total receipts of the 1919 fair were $321,574.55. The receipts from ticket sales were $211,633.50 and from sources other than ticket sales $109,941.05.

The ticket sales at the outside gates increased $31,545.50; night grandstand, $8,763.50; day grandstand $1,246.75 and night stock pavilion show $1,766.

The receipts from sources other than ticket sales increased $27,056.18. The receipts of the concession department increased $11,677.43; machinery department $4,502.80, and the sale of forage $6,000.38. The revenue of each of the other departments showed an increase over 1918 with the exception of the speed department. That department showed a decrease of $2,537.75 in entry fees received. This was due to the change in plan of racing whereby the entry fees were reduced from three percent of the purse to ten dollars in seven and eight hundred dollar purses. The total increase in the receipts of the 1919 fair over the 1918 fair was $70,379.93.

The disbursements for expenses other than the state fair, maintenance, or improvements was $12,823.53. The principal items that make up this amount are expense of the Stallion Registration Division, $1,924.98; expenses of 1918 fair paid in 1919 $1,120.28; curbing assessment against fair grounds $1,173.43; insurance premiums $2,836.75 and the expense incurred on account of the National Swine Show of $864.18. The latter item will be refunded.

The cost of maintaining the grounds and buildings was $21,617.51. This is an increase of $9,949.77, a greater portion of which is due to the increase in cost of material and labor.

In order to make the bleachers safe it was necessary to make extensive repairs that cost $4,223.87. Moving and wrecking eighteen frame cattle barns to make room for the new cattle barn cost $2,846.07. The other items for maintenance are itemized in the attached statement.

There was expended for additional ground and permanent improvements to the grounds and buildings $105,216.08. The forty-one acres of ground lying north of the race track purchased for fair ground purposes cost $61,827.20. Of this amount $54,167.50 was paid from the state appropriation for this purpose. The balance was paid out of the receipts of the state fair.

The extension of the storm sewer into the new ground, tiling, grading and leveling ground, grading and graveling streets and fencing cost $18,601.00, all of which was paid out of fair receipts.

The Exposition Building was remodeled at an expense of $10,147.26. This included a new shingle roof, cement floor and an entire remodeling of the interior, including new booths.

The new entrance at Grand Avenue cost $2,570.17; the extension of the water mains to the speed barns and new cattle barn $1,905.67. The other minor improvements are listed in the statement attached.

The total cost of the 1919 fair was $249,080.50. Cash premiums paid amounted to $85,538.31 and all other expense of the fair $163,542.19.

The total increase in the cost of the fair was $46,990.74. The increase in the amount of cash premiums amounted to $13,188.18 and the expense other than premiums $33,802.56. Everything that entered into producing the fair and the administration of various departments was affected by the increased cost of labor and material.

The attendance and receipts, however, kept pace with the expense and the fair made a profit, not figuring expenditures for improvements and maintenance, of $72,494.05. The following itemized statement takes into account all receipts and expenditures for the fiscal year and shows a cash balance in the Treasury November 30, 1919 of $56,140.44.

ITEMIZED STATEMENT OF RECEIPTS AND DISBURSEMENTS OF THE IOWA DEPARTMENT OF AGRICULTURE AND THE IOWA STATE FAIR AND EXPOSITION FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1919.

Cash balance December 1, 1918		$ 50,486.38
Receipts from sources other than fair:		
Fees stallion registration division	$ 5,039.00	
State appropriation for land	54,167.75	
State appropriation for curbing East 30th Street.	1,173.43	
State appropriation for support of the Department of Agriculture	2,400.00	
State appropriation for insurance on buildings	1,000.00	
Stall rent speed barns	225.00	
Pasture rent	171.15	
Rent from two cottages	271.50	
Rent for use of two cattle barns	195.00	
Use of barns for cattle sales	525.00	

Drayage for cattle sales		83.00	
Rent for use of poultry cooping		143.80	
Old cattle barn, sold		290.00	
Old lumber from cattle barns sold		416.15	
Kindling sold		78.00	
Copper and old iron sold		65.75	
Old smoke stack sold		30.00	
Rental for use of lumber		80.00	
Rental for storage concession outfit		20.00	
Centrifugal pump sold		55.00	
Water sold game farm		55.74	
Received for use of service flag		35.00	
Advertising in 1918 catalog		6.75	
Special prize money account 1918 fair		141.00	
Refund on deposit for U. S. Government exhibit		388.32	
Refund on Transportation of Guards		358.14	
Refund on I. M. C. A. Sanction fees		50.00	
Refund overpayment advertising account		127.50	
Refund over deposit to payroll account		104.00	
Refund insurance premium		6.50	
Sale of houses on new ground		4,152.50	
Rent for use of show case		4.00	
Interest on daily balance		958.15	
Total receipts other than state fair			$ 72,817.13
Stall rent horse department		$ 1,241.00	
Stall rent cattle department		1,453.50	
Pen rent swine department		1,273.00	
Pen rent sheep department		248.50	
Coop rent poultry department		479.25	
Coop rent rabbit department		95.00	
Concessions poultry department		240.00	
Machinery Department:			
Floor space Machinery Hall	$ 7,741.50		
Floor space under Grandstand	644.80		
Floor space Power Hall	600.00		
Outside space contracts	371.00	$ 9,357.30	
Concessions Floral Hall		200.00	
Concessions Agricultural Bldg		2,147.50	
Dairy Department, ice cream sales		3,316.45	
Concessions and space, Exposition Bldg		3,085.00	
Concessions and Privileges:			
General concessions	$ 23,718.50		
Wortham Shows (percent)	17,357.46		
Giant Coaster (percent)	2,699.02		
Grandstand concessions (percent)	2,746.93		
Score card (percent)	681.24		
Delivery and baggage permits	592.00		
		$ 47,795.15	
Light and power sold		648.58	
Receipts from drayage department		1,076.50	
Speed Department:			
Entry fees	$ 4,348.50		
Nomination fees Iowa State Fair Futurity	361.31		
Nomination fees Western Breeders' Futurity	945.00		
		5,654.81	
Sale of forage		16,995.70	
Association special premiums		10,504.30	
Advertising in premium list		1,347.50	
Advertising in official catalog		1,860.00	
Telephone collections		405.87	
Entry fees saddle horse stake		320.00	
Profits from sale of apples Horticultural Department		30.81	
Refund overpayment on payrolls		22.00	
Refund on freight paid		5.00	
Deposit with protest forfeited		20.00	
Receipts from vending machines		11.35	
Receipts from Day Nursery		106.98	
Total receipts of fair other than ticket sales		$109,941.05	

Ticket Sales:			
Outside gates	$137,838.75		
Day Grandstand	32,877.25		
Night Grandstand	36,358.25		
Night horse show, stock pavilion	4,559.25		
Total ticket sales		$211,633.50	
Total receipts of fair			$321,574.55
Grand total receipts			444,878.06

DISBURSEMENTS.

Disbursements other than fair or improvements:			
Stallion Registration Division:			
Salary, chief clerk	$ 1,631.61		
Salary, clerk and stenographer	1,208.00		
Salary, extra clerk	31.50		
Certificates	78.75		
Seals for certificates	22.67		
Stud books	5.10		
Office supplies	3.00		
Dues, National Association	4.00		
		$ 2,984.63	
Publicity Department:			
Salary, director, five months	$ 833.35		
Salary, stenographer	78.62		
Salary, extra clerks	53.88		
Printing Greater Iowa	608.21		
Postage, Greater Iowa	30.00		
Drayage, Greater Iowa	8.75		
Cuts and engraving	71.19		
Addressograph plates	38.39		
Envelopes and wrapping paper	101.34		
Newspaper clippings	90.00		
Printing address of A. L. Sponsler	10.00		
Subscriptions, periodicals	1.25		
		$ 1,924.98	
Expense on account live stock sales		391.86	
State Agricultural Convention		535.13	
Expense of 1918 fair paid during 1919:			
Newspaper advertising	$ 122.20		
Expense account Art Exhibit	296.30		
Scholarships in Judging Contest	475.00		
Expense of transporting guards	106.50		
Prizes in judging team contest	50.00		
Expense Educational Department	10.59		
Engraving cups and medals	35.08		
Printing	2.35		
Binding 1918 award books	8.00		
Refund swine pen rent	7.00		
Laundry Day Nursery	7.26		
		1,120.28	
Curbing assessment on East 30th St		1,173.43	
Expense of auction sale of houses		72.31	
Extra clerical help on crop statistics		412.36	
Insurance premiums on buildings		2,836.75	
Doctor bills on account of injured employes		26.50	
Expense on account National Swine Show		864.18	
Overpayment advertising account (refunded)		127.50	
Premiums, Secretary's bond		25.00	
Dues Des Moines commercial organizations		65.00	
Hauling poultry cooping		35.88	
City Directory		8.00	
Subscriptions to newspapers		12.60	
Expense of committee to appraise land		20.00	
Cuts for year book		35.79	
Printing county fair form of statement		10.30	
Unpaid checks taken up		97.75	
Dues Showman's League of America		25.00	
Flowers Mrs. J. Alex Sloan, deceased		15.00	
Meals for help during street car strike		3.30	
Total expense other than fair			$ 12,823.53

Maintenance Grounds and Buildings:

Hauling manure from barns		$ 789.77	
Speed barns, repairs		50.54	
Cleaning buildings		333.39	
Cleaning grounds		154.16	
Mule team, feed, shoeing, etc		437.48	
Power Hall, repairs		5.00	
Farm house, repairs		167.15	
Water system, repairs		16.50	
Superintendent of Grounds and assistants		2,775.78	
Water except July, August and September		123.28	
Closet, repairs		354.46	
Streets, dragging and oiling		1,807.36	
Tools and implements, repairs		174.22	
Work on race track except during fair		653.02	
Grand Ave. entrance, repairs and shutters		26.49	
Trees, shrubs and landscape work		1,033.82	
Grading and sodding		929.84	
Fences, repairs		333.89	
Pumps at speed barns, repairs		5.65	
Horse barn, repairs		277.80	
Machinery Hall, repairs		74.55	
Mowing grass and weeds		290.75	
Light system, repairs		228.81	
Truck, repairs, gasoline and oil		605.72	
Swine pavilion, repairs		110.44	
Glass for miscellaneous buildings		146.43	
Poultry coops, repairs		31.91	
Bleachers, repairs:			
Lumber and nails	$ 2,722.62		
Labor	1,443.65		
Repairs to toilets	57.60		
		4,223.87	
Brick dining halls		61.25	
Freight and drayage		146.05	
Lumber shed, repairs		103.00	
Frames for drink stands, repairs		53.00	
Ticket booth, repairs		8.00	
Scales, moving and resetting		29.00	
Drainage system, cleaning out		24.44	
Cattle barn No. 4, painting roof		138.22	
Flag pole, putting up chain		25.00	
Street car entrance, painting sign		27.27	
Administration Bldg., painting and repairs		316.96	
Walnut street entrance, repairs		6.67	
Agricultural Bldg., painting and repairs		332.53	
Women and Children's Bldg., painting and repairs		152.85	
Floral Hall, spraying and repairs		31.50	
Barber shop, spraying		5.00	
Exposition Building, spraying		169.00	
Amphitheater chairs, repairs		6.17	
Waste paper boxes, repairs		13.00	
Lawn seat, repairs		4.28	
Moving and wrecking 18 frame cattle barns		2,846.07	
Stock Pavilion, repairs		27.50	
Paddocks and keys		51.55	
Vaudeville stages, painting		9.19	
Repairing awning west end grandstand		46.10	
Rock Island entrance, repairs		8.56	
Hospital Bldg., repairs		11.45	
Boys' and Girls' Club Building		10.80	
Amphitheater repairs		53.30	
Cooling out paddock		10.80	
Electric current, except during August		100.00	
Cottage near Floral Hall, repairs		7.20	
Cottage east of Poultry Bldg., repairs		10.28	
Sim's cottage, repairs		8.00	
Lumber used in miscellaneous repairs		449.45	
Hardware used in miscellaneous repairs		106.56	
Miscellaneous repairs		45.43	
			$ 21,617.51

Additions and permanent improvements:

Light system extensions	$ 1,145.48
Streets, cinders and gravel	541.88
Walks and curbing	1,312.62

Fair Ground Equipment:

Sulky for speed dept.	$ 100.00	
Chautauqua outfit, tent and bleachers	250.00	
Leather satchels and straps, Treasurer's Dept.	56.00	
Gravity burners for canning demonstration	48.00	
Umbrellas for admission dept.	14.00	
Canvas for back of grandstand	86.40	
Uniforms for ringmen	15.20	
Gasoline, storage tank, 500 gallons	50.00	
Truck castors	19.82	
Ticket boxes, Treasurer's Dept.	79.70	
Garbage cans	78.00	
Garden hose	22.50	
Water bottles and cooler	17.20	
		836.82

Tools and Implements:

Manure spreader	176.40	
Spray machine	250.00	
Wagon racks	36.00	
Sod cutter	8.50	
Miscellaneous small tools	142.36	
		613.26

Real Estate Purchased for Fair Grounds:

Lucinda Short, Lot No. 1 containing 11 acres	$ 9,000.00	
Lucinda Short, interest on contract note	82.67	
Lot No. 2 containing 10 acres, condemned	14,436.00	
Herman Auestad, tenant in house.	25.00	
R. W. Hughes for crop on land condemned	150.00	
Adv. notice of condemnation	11.36	
Expense of sheriff's jury	213.65	
Lucinda Short, Lot No. 3 containing 9 acres	11,750.00	
Phoebe D. Sims, Lot No. 4 containing 10 acres	15,000.00	
J. E. Aulman, house and lot	2,900.00	
Cesar Manfredo, house and lot	2,500.00	
Clayton Norgar, house and lot	2,875.00	
C. D. Nichols, house and lot	2,800.00	
Taxes on Lot No. 1	75.23	
Recording deeds	6.65	
Legal services	20.00	
Interest on contracts	21.64	
		$ 61,867.20
Streets, grading and graveling new ground		7,700.65
Grading and filling new ground		2,047.08
Tiling and draining new ground		1,852.22
Fencing new ground		2,294.70
Ice house		221.45
Toilet east farm barn		40.00
Farm house, screens for porch		21.56
Storm sewer		4,706.35
Tile drain from Grand Ave. to Walnut St.		233.92

Exposition Building Improvements:

Cement floor	$ 2,100.97	
Lumber, roof and interior	4,191.54	
Carpenter work	2,835.86	
Eave troughs and flashing	689.29	
Nails and hardware	134.90	
Paint	90.10	
Toilet	104.60	
		$ 10,147.26
Cement steps west entrance Exposition Bldg.		520.36
Granite retaining wall east W. & C. Bldg.		261.44
Water system, extension to speed barns and cattle barn		1,905.67
Women and Children's Building		53.63
Administration building furniture		874.54
Horse show ring and bleachers		821.29
Grand Avenue entrance		2,570.17

Office Equipment:

Underwood typewriter	48.03		
Covers for judge's books	35.00		
		83.03	
Trees and shrubs		236.91	
Agricultural Building, county exhibit booths		653.68	
Sheep barn, feed racks		158.06	
Brick dining halls, tables and plumbing		120.41	
Women's and Children's Bldg., furnishings		128.50	
Toilet No. 17, converted into sanitary toilet		143.63	
New cattle barn, grades and adv. for bids		55.74	
Culvert at Rock Island entrance		134.25	
Electric light globes		555.80	
Playground, fence posts		13.50	
Show case, culinary department		101.78	
Administration Building		20.90	
College Building		95.14	
Telephone system, extension		37.70	
Board of Control Bldg., new toilet		87.50	
Total additions and improvements			$105,216.08

EXPENSE OF FAIR.

Expense of fair other than premiums:

Executive committee meetings	$ 1,449.95
Special committee meetings	1,637.70
Express, telegraph and telephone	663.49
Postage	1,616.40

Printing:

400	Christmas cards and envelopes	$ 31.60
1,000	bill heads	13.50
2,000	envelopes	12.45
750	premium list adv. contracts	5.95
10,000	circulars, proposed cattle barn	102.00
4,000	Junior Dept. premium lists	80.00
750	premium list adv. circulars	8.15
700	ground plats	9.65
12,000	Boys' Camp circulars	35.00
12,000	premium lists	1,376.00
5,000	gummed address labels	8.00
1,000	No. 6 Futurity entry blanks	6.75
2	entry books	46.00
6	concession contract books	26.80
3,000	advance sheets, cattle dept.	22.50
500	advance sheets, dairy dept.	7.00
1,000	advance sheets, Machinery Dept.	7.00
1,000	balance sheets	12.65
10	large receipt books	13.46
2,700	speed programs and entry blanks	27.78
10,000	premium list envelopes	35.86
7,500	entry blanks and circulars draft horse futurity	44.80
1,000	plats, Machinery Hall	4.75
1,000	applications, outside space	7.00
750	applications floor space, Machinery Dept.	5.00
500	appointment cards, baby health dept.	4.25
1,000	certificates for return of fgt.	6.25
400	exhibitors' receipts, textile and china dept.	4.00
700	premium warrant enclosures	5.50
400	invitations and envelopes, baby party	18.75
500	shipping tags, creamery butter	5.00
1,000	coin tags, treasurer's dept.	5.25
14,000	entry tags	53.00
10	books, floor space contracts	19.85
50	cloth banners, "No parking"	25.00

400	large daily programs	81.50	
1,000	index cards, live stock entries	8.81	
1,000	ground order blanks	10.19	
1	record book, concession dement	19.85	
2	record books, public safety and admissions dept.	26.65	
2	record books, Machinery Dept.	31.90	
3,000	catalogs, Graphic and Plastic Arts Dept	43.20	
8,000	multigraph letters	40.65	
1,000	score cards, baby health dept.	8.75	
1,000	premium warrants	18.00	
4,000	coop numbers	20.75	
2,000	contracts, Machinery Dept. space	17.50	
14,250	entry blanks	76.50	
500	advertising contracts	6.25	
300	entry lists, speed dept.	28.75	
2,000	judge's sheets, poultry dept.	22.65	
200	entry lists, futurities	33.50	
2,000	entry tags, Junior Dept.	15.50	
1,500	entry blanks, boys' and girls' judging contest	8.40	
12,860	stall, ring and concession numbers	282.50	
500	number tags, baby health contest	29.80	
500	entry lists, speed dept., late closing	36.75	
4,000	music programs	28.40	
200	placards, Sunday School	12.80	
2,000	Sunday School programs	31.00	
700	rabbit dept. folders	10.50	
4,000	folders, contests for boys and girls	35.00	
3,000	catalog cards	16.35	
1,000	machinery index cards	5.50	
1,000	buff guide cards, catalog	2.81	
300	lists of county fairs	3.50	
500	ledger sheets, speed dept.	9.85	
1,000	premium statements	9.70	
750	entry cards, creamery butter	5.65	
1,500	folders, baby health dept.	16.70	
6,000	premium tags	33.20	
250	placards, "Notice to Campers"	8.45	
500	invitations and envelopes	27.00	
100	feed barn order books	28.25	
500	stock pavilion ticket reports	14.62	
500	day grandstand ticket reports	11.62	
5,000	variety cards, horticultural dept.	5.50	
1,000	drayage slips	10.30	
100	placards, "Aviation Field"	10.85	
50	placards, "Day Nursery"	3.65	
300	score cards, creamery butter	3.90	
10,000	official catalogs	2,407.44	
4,000	catalogs, baby health dept.	85.16	
50	placards, amphitheater admissions	3.70	
750	Horse Dept. judging program	24.44	
8,000	night horse show programs	57.90	
50	official car signs	3.00	
234	arm numbers, night horse show	13.00	
500	release cards, speed dept.	4.30	
18,400	race programs, one-half cost	151.80	
200	business cards, Dr. Means	1.10	
Tickets	for all gates and side shows	1,349.85	
			$ 7,411.64

Advertising:

Country weekly papers	$ 4,513.73	
Plate matter for country papers	1,176.18	
Daily papers outside Des Moines	787.96	
Des Moines daily papers	4,477.80	
Agricultural, live stock and breed papers	1,621.53	
Horse papers, adv. speed program	668.03	
Implement and machinery papers	168.00	
Supt. Adv., salary, five months	708.34	
Assistant, salary	110.00	
Stenographer and clerk, salary, five months	500.00	
Printing Greater Iowa	399.78	
Postage on Greater Iowa	10.00	
Hangers and window cards	773.00	
Dates for billboard paper	18.50	
Billboard service	1,084.00	
Distributing advertising matter	74.00	
Cuts and electros	233.40	
Co-operative Publicity Bureau, news matter	129.00	
Photographs	35.20	
Letter inserts	47.95	
		17,536.40

Music and Attractions:

Night Show, "Battle of Chateau Thierry"	9,050.00	
Thaviu's Band and Ballet	3,950.00	
Henry's Band and Soloists	1,602.00	
Fischer's Burlington Band	1,350.00	
National Drum Corps	300.00	
168th Regimental Band	1,200.00	
Mahaffey Orchestra	225.00	
Hawaiian Orchestra	550.00	
Nine hippodrome acts	5,325.00	
Gertson & Pack, aviators	4,565.00	
Raub balloon ascensions	350.00	
Hankinson's auto polo	1,800.00	
		$ 30,267.00

Auto races, prizes and bonuses	4,800.00
Light and power (current)	827.64
Light and power (labor)	523.06
Water, July, August and September	645.75
Refunds, stall rent, tickets, etc	211.00
Forage purchased for feed barn	15,689.08
Office supplies, stationery, etc	590.59
Salaries, secretary and assistants	8,568.75
Board meeting in February to revise premium list	378.00
Assistants and foreman, Grounds Department	1,119.28
Sanitary Department	1,425.38
Labor on track during fair	198.54
Labor cleaning and preparing grounds	1,588.23
Labor cleaning and preparing buildings	1,624.93
Decorating all buildings	1,322.68
Payroll Admissions Department	5,409.00
Payroll Concession Department	2,762.00
Payroll Public Safety Department	8,726.01
Payroll Treasurer's Department	2,481.82
Payroll Ticket Auditing Department	395.00
Payroll Speed Department	1,084.00
Payroll Horse Department	1,896.71
Payroll Cattle Department	1,651.21
Payroll Swine Department	1,046.10
Payroll Sheep Department	501.00
Payroll Poultry Department	699.85
Payroll Machinery Department	1,384.16
Payroll Dairy Department	156.75

Dairy and Ice Cream Department:

Payroll Ice Cream Stand	$ 256.15	
Ice cream purchased	1,477.30	
Sanitary dishes and spoons	128.50	
Signs and placards	7.50	
Miscellaneous supplies	24.35	
Government tax on cream sold	331.64	
		2,225.44

Payroll Agricultural Department		823.00	
Payroll Horticultural Department		354.55	
Payroll Floricultural Department		153.75	
Payroll Textile and China Department		793.36	
Payroll and expense Art Department		419.00	
Payroll and expense Junior Department		781.86	
Payroll Baby Health Department		911.88	
Payroll and expense Program Committee Women and Children's Building		505.06	
Payroll and expense Day Nursery		175.00	
Expense Rural School Department		16.20	
Matron Women's and Children's Building		55.00	
Expense of Cow Test Association exhibit		255.20	
Expense Boys' State Fair Camp		1,938.46	
Payroll Live Stock Sanitary Department		261.00	
Payroll property men		309.85	
Payroll Awards Department		211.25	
Payroll janitors, Administration Bldg		571.00	
Payroll janitors, Women's Bldg		560.70	
Expense Boys' and Girls' Judging Contest		83.50	
Photographs of 1919 prize winners		257.40	
Sanction fee I. M. C. A.		100.00	
Dues American Trotting Association		105.00	
Premium on bond, employes Treasurer's Dept		64.00	
Taxicab service		9.00	
Army equipment lost by guards		100.48	
Cuts and electros, plats, floor plans, etc		38.01	
Plants and flowers and gardeners		1,505.74	
Expense for U. S. Government exhibit		3,000.00	
Cups, medals and engraving		728.23	
Freight bills		82.47	
Commission for soliciting adv. for catalog		650.00	
Calcium chloride for track		102.90	
Signs for night shows, buildings and exhibits		689.83	
Repairing turnstiles and locks		337.50	
Water system, temporary extensions		242.83	
Drayage Dept., truck drivers and gasoline		4,278.65	
Miscellaneous labor two weeks of fair		3,196.85	
Coal for dining halls		120.58	
Firemen for dining halls		130.00	
Engine to furnish steam for dining halls		140.00	
Repairing holes in fences		30.00	
Premium ribbons and badges		1,988.99	
Placing and removing amphitheater chairs		101.76	
Tan bark for Stock Pavilion Show Ring		295.69	
Temporary swine pens		217.43	
Putting up screens		11.35	
Temporary cattle stalls		77.17	
Camp Ground lights		45.59	
Building temporary check stand		11.22	
Closing buildings after fair		192.61	
Meals for guests and State Day Banquet		865.00	
Settlement of action, State vs. Wyant		84.37	
Fair Ground Supplies:			
Office supplies	$ 252.71		
Toilet paper and paper towels	384.20		
Brooms and maps	80.80		
Sweeping compound	56.80		
Soap and cleaning compounds	45.00		
Gas mantles for camp ground lights	36.60		
Stencils for mimeograph	51.50		
Miscellaneous hardware	181.66		
Kerosene for stoves	23.19		
Paper for tables and shelves	18.40		
Supplies for Day Nursery	6.24		
Drugs for rest room	9.65		
Miscellaneous	13.56		
		$ 1,160.31	
Rental tents, cots, bedding, chairs, etc		$ 2,391.07	
Laundry Day Nursery and Club Dining Hall		17.01	
Rope for flag poles		41.63	
Rental for typewriters, Press Office		14.05	
Expense installing telephones		423.31	
Expense of fair other than premiums			$163,542.19

Cash Premiums Paid:

Horses	$ 15,635.00	
Cattle	21,399.20	
Swine	8,316.00	
Sheep	4,121.00	
Goats	219.00	
Poultry	1,260.00	
Rabbits	86.00	
Agricultural Products	6,076.00	
Culinary Department	803.00	
Honey and bees	477.00	
Dairy products	657.00	
Horticulture	2,373.50	
Floriculture	1,733.90	
Textile, China, etc.	1,060.00	
Graphic and Plastic Arts	626.00	
Junior Department	1,401.00	
Boys' and Girls' Judging Contest	650.00	
Boys' Team Judging Contest	400.00	
State Spelling Contest	100.00	
Speed events	18,144.71	
Total premiums paid		$ 85,538.31
Total expense of fair		249,080.50
Grand total disbursements		$388,737.62

SUMMARY OF RECEIPTS AND DISBURSEMENTS AND RECONCILIATION OF ACCOUNT WITH THE TREASURER.

RECEIPTS.

Cash balance December 1, 1918		$ 50,486.38
Receipts from sources other than fair		72,817.13
Receipts of fair other than ticket sales	$109,941.05	
Receipts from ticket sales	211,633.50	
Total receipts of fair		321,574.55
Grand total receipts		$444,878.06

DISBURSEMENTS.

Disbursements other than fair or improvements		$ 12,823.53	
Maintenance grounds and buildings		21,617.51	
Additions and permanent improvements		105,216.08	
Expense of fair other than premiums	$163,542.19		
Cash premiums paid	85,538.31		
Total cost of fair		249,080.50	
Grand total disbursements			388,737.62
Balance on hand November 30, 1919			$ 56,140.44
Warrants outstanding			3,742.38
Cash balance in treasury, November 30, 1919			59,882.82

COMPARATIVE STATEMENT OF TICKET SALES AT OUTSIDE GATES, DAY AND NIGHT GRANDSTAND AND STOCK PAVILION NIGHT SHOWS FOR THE 1919 AND 1918 IOWA STATE FAIRS.

General Admissions	1919 Fair			1918 Fair		
	Price	No. Sold	Total Value	Price	No. Sold	Total Value
Outside Gates:						
General Admission	$ .50	206,297	$ 103,148.50	$ .50	162,542	$ 81,271.00
Children, half fare	.25	44,931	11,232.75	.25	34,023	8,505.75
Gen. Adm. after 5 P. M.	.25	35,375	8,843.75	.25	24,208	6,052.00
Campers' Round-up	.50	10,570	5,285.00	.50	8,705	4,362.50
Campers' Tickets	2.00	2,593	5,186.00	2.00	1,564	3,128.00
Exhibitors' Tickets	2.00	1,808	3,616.00	2.00	1,400	2,800.00
Solicitors' Tickets	2.50	45	112.50	--------	----------	----------
Auto for week	5.00	80	400.00	5.00	35	175.00
Over Cash Turnstiles	--------	----------	14.25	--------	----------	9.00
	--------	----------	$ 137,838.75	--------	----------	$ 106,293.25
Day Grandstand:						
Bleachers or Paddock	$ .25	38,855	$ 9,713.75	$ .25	35,302	$ 8,823.00
Quarter Stretch	.25	3,672	918.00	.25	4,739	1,184.75
Reserved Seats	.50	40,159	20,079.50	.50	39,041	19,520.50
Box Seats	.75	2,888	2,166.00	.75	2,803	2,102.25
Total Day Grandstand	--------	85,574	$ 32,877.25	--------	81,855	$ 31,630.50
Night Grandstand:						
Bleachers or Paddock	$ .25	65,558	$ 16,389.50	$ .25	43,090	$ 10,772.50
Reserved Seats	.50	36,033	18,016.50	.50	30,262	15,131.00
Box Seats	.75	2,603	1,952.25	.75	2,255	1,691.25
Total Night Grandstand	--------	104,194	$ 36,358.25	--------	75,607	$ 27,594.75
Night Stock Pavilion:						
Reserved Seats	$ .50	8,084	$ 4,042.00	$ .50	5,491	$ 2,745.50
Standing Room	.25	2,069	517.25	.25	191	47.75
Total Stock Pavilion	--------	10,153	$ 4,559.25	--------	5,682	$ 2,793.25
Total Ticket Sales	--------	----------	$ 211,633.50	--------	----------	$ 168,311.75

SUMMARY.

	1919	1918	Increase	Decrease
Outside Gates	$ 137,838.75	$ 106,293.25	$ 31,545.50	------------
Day Grandstand	32,877.25	31,630.50	1,246.75	------------
Night Grandstand	36,358.25	27,594.75	8,763.50	------------
Stock Pavilion	4,559.25	2,793.25	1,766.00	------------
Totals	$ 211,633.50	$ 168,311.75	$ 43,321.75	------------

COMPARATIVE STATEMENT OF RECEIPTS 1919 AND 1918 FAIRS.

	1919	1918	Increase	Decrease
Horse Department	$ 1,241.00	$ 1,040.00	$ 201.00	
Cattle Department	1,453.50	922.50	531.00	
Swine Department	1,273.00	1,219.00	54.00	
Sheep Department	248.50	188.50	60.00	
Poultry Department	814.25	420.00	394.25	
Machinery Department	9,357.30	4,854.50	4,502.80	
Agricultural Department	2,347.50	2,055.03	292.47	
Dairy Department—Ice Cream Sales	3,316.45	2,636.50	679.95	
Exposition Department	3,085.00	2,115.00	970.00	
Concessions and privileges	47,795.15	36,117.72	11,677.43	
Light and Power (sold)	648.58	595.85	52.73	
Drayage Department	1,076.50		1,076.50	
Speed Department	5,654.81	8,192.38		$ 2,537.57
Forage Department	16,995.70	10,995.32	6,000.38	
Association Special Premiums	10,504.30	8,699.86	1,804.44	
Advertising in Premium List	1,347.50	1,284.00	63.50	
Advertising in Catalog	1,860.00	1,104.50	755.50	
Telephone collections	405.87	238.96	166.91	
Entry Fees Saddle Horse Stake	320.00		320.00	
Day Nursery	106.98	70.81	36.17	
Miscellaneous Receipts	89.16	134.44		45.28
Ticket Sales:				
Outside Gates	137,838.75	106,293.25	31,545.50	
Day Grandstand	32,877.25	31,630.50	1,246.75	
Night Grandstand	36,358.25	27,594.75	8,763.50	
Stock Pavilion, Night Show	4,559.25	2,793.25	1,766.00	
Totals	$ 321,574.55	$ 251,196.62	$ 72,960.78	$ 2,582.85
Total Increase		70,377.93		70,377.93
	$ 321,574.55	$ 321,574.55	$ 72,960.78	$ 72,960.78

COMPARATIVE STATEMENT OF PREMIUMS PAID 1919 AND 1918 FAIRS.

	1919	1918	Increase	Decrease
Horse	$ 15,635.00	$ 13,555.00	$ 2,080.00	
Cattle	21,339.00	16,172.55	5,226.65	
Swine	8,316.00	6,881.50	1,434.50	
Sheep	4,121.00	3,402.00	718.00	
Goats	219.00	77.00	142.00	
Poultry	1,260.00	856.50	403.50	
Rabbits	86.00	41.50	44.50	
Agricultural	6,076.00	5,102.50	973.50	
Culinary	803.00	772.50	30.50	
Honey and Bees	477.00	418.00	59.00	
Dairy	657.00	642.00	15.00	
Horticultural	2,373.50	1,993.50	380.00	
Floricultural	1,733.90	1,533.70	200.20	
Textile, China, Etc.	1,060.00	1,035.00	25.00	
Graphic and Plastic Arts	626.00	648.00		$ 22.00
Junior Department	1,401.00	1,563.00		162.00
Boys' and Girls' Judging Contest	650.00		650.00	
Boys' Team Judging Contest	400.00		400.00	
State Spelling Contest	100.00	100.00		
Speed	18,144.71	17,555.88	588.83	
Total	$ 85,538.31	$ 72,350.13	$ 13,188.18	$ 184.00
Total Increase		13,004.18		13,004.18
	$ 85,538.31	$ 85,538.31	$ 13,188.18	$ 13,188.18

COMPARATIVE STATEMENT OF EXPENSE OTHER THAN PREMIUMS FOR THE 1919 AND 1918 FAIRS.

	1919	1918	Increase	Decrease
Executive committee meetings	$ 1,449.95	$ 544.60	$ 905.35	
Special committee meetings	1,637.70	869.01	768.69	
Express, telegraph and telephone	663.49	374.74	288.75	
Postage	1,616.40	1,543.84	72.56	
Printing	7,411.64	5,602.21	1,809.43	
Advertising	17,536.40	16,439.61	1,096.79	
Supplies, stationery, etc.	590.59	383.25	207.34	
Music and attractions	30,267.00	23,963.93	6,303.07	
Auto races, prizes and bonuses	4,800.00	6,300.00		$ 1,500.00
Light and power (current)	827.64	743.83	83.81	
Light and power (labor)	523.06	662.27		139.21
Water, July, August and September	645.75	605.68	40.07	
Refund, stall rent, tickets, etc.	211.00	259.75		48.75
Forage purchased for feed barn	15,689.08	10,627.73	5,061.35	
Salaries, secretary and assistants	8,568.75	7,531.44	1,037.31	
Board meetings	378.00	759.20		381.20
Assist's and foremen Grounds Dept.	1,119.28	721.45	397.83	
Sanitary Department	1,425.38	1,495.90		70.52
Track work during fair	198.54	98.66	99.88	
Cleaning grounds and buildings	3,213.16	2,052.81	1,160.35	
Decorating all buildings	1,322.68	863.65	459.03	
Payroll admissions department	5,409.00	3,365.15	2,043.85	
Payroll concession department	2,762.00	2,227.50	534.50	
Payroll public safety department	8,726.01	8,895.17		169.16
Payroll treasurer's department	2,481.82	1,965.75	516.07	
Payroll ticket auditing department	395.00	440.90		45.90
Payroll speed department	1,084.00	841.75	242.25	
Payroll horse department	1,896.71	1,587.20	309.51	
Payroll cattle department	1,651.21	1,152.98	498.23	
Payroll swine department	1,046.10	672.20	373.90	
Payroll sheep department	501.00	441.00	60.00	
Payroll poultry department	699.85	336.50	363.35	
Payroll machinery department	1,384.16	841.60	542.56	
Payroll and expenses dairy and ice cream department	2,382.19	1,577.43	804.76	
Payroll agricultural department	823.00	689.90	133.10	
Payroll horticultural department	354.55	220.71	133.84	
Payroll floricultural department	153.75	168.00		14.25
Payroll textile and china	793.36	478.96	314.40	
Payroll and expenses art department	419.00	223.54	195.46	
Junior department	781.86	622.15	159.71	
Baby health department	911.88	793.00	118.88	
Program committee W. & C. building	505.06	499.44	5.62	
Payroll and expense day nursery	175.00	155.50	19.50	
Expense boys' state fair camp	1,938.46	1,958.60		20.14
Payroll live stock sanitary departm't	261.00	399.70		138.70
Payroll property men	309.85	226.50	83.35	
Payroll awards department	211.25	138.39	72.86	
Payroll janitors Admin. building	571.00	567.00	4.00	
Payroll janitors W. & C. building	560.70	567.00		6.30
Expense boys' judging contest	83.50	65.50	18.00	
Plants, flowers and gardeners	1,505.74	587.62	918.12	
Expense U. S. Gov. exhibit	3,000.00	1,000.00	2,000.00	
Cups, medals and engraving	728.23	683.09	45.14	
Freight bills	82.47	85.24		2.77
Signs for night show, buildings, etc.	689.83	452.25	237.58	
Water system, temporary extensions	242.83	210.81	32.02	
Miscellaneous labor during fair	3,196.85	3,307.88		111.03
Premium ribbons and badges	1,988.99	1,426.63	562.36	
Firemen and coal for dining halls	390.58	269.14	121.44	
Ground supplies	1,160.31	1,132.82	27.49	
Tents, cots, bedding, etc.	2,391.07	2,207.60	183.47	
Drayage department	4,278.65		4,278.65	
All other items of expense	4,518.88	3,813.97	704.91	
Total expense other than prem's.	$ 163,542.19	$ 129,739.63	$ 36,450.49	$ 2,647.93
Total increase		33,802.56		33,802.56
	$ 163,542.19	$ 163,542.19	$ 36,450.49	$ 36,450.49

SPEED DEPARTMENT, IOWA STATE FAIR AND EXPOSITION 1919.

In accordance with the rules and advertised conditions under which the races were conducted, all entrance fees were added to the purse.

HARNESS RACES

Class	Amount Offered	Entry Fees Received	Amount Paid Out	Net Cost	Number Starters
*Two-year-old trot	$ 300.00	$ 111.00	$ 411.00	$ 300.00	5
2:25 trot	600.00	153.00	753.00	600.00	8
2:20 trot	600.00	153.00	753.00	600.00	6
2:16 trot	600.00	108.00	708.00	600.00	5
*2:14 trot—The Great Western	1,500.00	1,042.00	2,542.00	1,500.00	11
2:13 trot	600.00	125.00	725.00	600.00	8
2:10 trot	800.00	93.00	893.00	800.00	6
††Saddle trot	200.00	----------	----------	----------	----------
*Two-year-old pace	300.00	54.00	354.00	300.00	4
2:20 pace	600.00	221.00	821.00	600.00	11
2:17 pace	600.00	176.00	776.00	600.00	8
*2:14 pace—The Hawkeye	1,500.00	1,410.00	2,910.00	1,500.00	13
2:12 pace	600.00	185.00	785.00	600.00	5
2:09 pace	800.00	145.00	945.00	800.00	9
††Free-for-all pace	800.00	10.00	----------	----------	----------
Total	$ 10,400.00	$ 3,986.00	$ 13,376.00	$ 9,400.00	99

*Early Closing Events.
††Declared off on account of insufficient number of entries.

FUTURITIES

Iowa State Fair No. 4—(Trotting Division)	$ 700.00	$ 294.32	$ 994.32	$ 700.00	4
Iowa State Fair No. 4—(Pacing Division)	300.00	126.39	426.39	300.00	1
W. B. Futurity No. 6—(Trotting Division)	----------	542.50	542.50	†250.00	3
W. B. Futurity No. 6—(Pacing Division)	----------	402.50	402.50	†100.00	2
W. B. Futurity Bonus	----------	----------	350.00	----------	----------
	$ 1,000.00	$ 1,365.71	$ 2,715.71	$ 1,350.00	10

†Bonus Paid for Western Breeders' Futurity.

RUNNING RACES

State Fair Derby	$ 400.00	$ 48.00	$ 448.00	$ 400.00	4
5-furlong dash	125.00	20.00	145.00	125.00	4
6-furlong dash	150.00	35.00	185.00	150.00	7
1-mile dash	150.00	35.00	185.00	150.00	7
5-furlong run	125.00	15.00	140.00	125.00	3
6-furlong run	150.00	30.00	180.00	150.00	6
4½-furlong dash	125.00	20.00	145.00	125.00	4
5-furlong dash	125.00	25.00	150.00	125.00	5
6-furlong dash	150.00	30.00	180.00	150.00	6
5-furlong dash	125.00	25.00	150.00	125.00	5
4½-furlong dash	125.00	20.00	145.00	125.00	4
Total	$ 1,750.00	$ 303.00	$ 2,053.00	$ 1,750.00	55
Total harness races	11,400.00	5,351.71	15,741.71	10,750.00	109
Grand total all races	$ 13,150.00	$ 5,654.71	$ 18,144.71	$ 12,500.00	164

The following is the attendance of the 1919 fair, by days, compared with 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917 and 1918 fairs:

	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910
Wednesday	5,567	5,214	6,098	4,871	3,112	4,537	3,849	-------	-------	-------
Thursday	10,428	8,346	10,435	9,004	7,610	9,886	8,608	3,090	4,074	-------
*Friday	40,004	29,713	38,079	30,671	27,722	27,613	33,020	7,503	6,063	4,956
†Saturday	37,507	24,573	29,771	29,853	17,158	27,999	26,861	27,957	27,957	30,512
Sunday	28,497	20,938	28,719	24,236	14,190	22,200	25,211	18,902	17,612	16,062
Monday	61,431	39,089	43,649	46,983	35,085	41,229	58,045	40,602	37,309	25,355
Tuesday	78,612	54,434	65,292	59,936	47,501	39,612	66,465	60,379	64,699	52,208
Wednesday	71,653	50,876	66,735	49,033	44,103	46,496	40,972	58,643	60,580	57,918
Thursday	46,613	67,072	38,351	24,270	31,955	31,523	17,431	38,831	34,117	31,854
Friday	27,835	24,122	22,169	13,115	16,630	21,978	-------	16,116	18,173	12,368
Totals	408,147	324,377	349,298	291,972	245,066	273,073	280,462	272,023	270,082	231,233

*Children's day, 1913-1914-1915-1916-1917-1918-1919.
†Children's day, 1910-1911-1912.

ADMISSIONS TO GRAND STAND, AFTERNOON AND EVENING, 1919, COMPARED WITH 1915, 1916, 1917 and 1918.

	1919 Fair		1918 Fair		1917 Fair		1916 Fair		1915 Fair	
	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions	Day admissions	Night admissions
Friday	12,531	12,436	8,090	6,664	9,644	8,509	3,824	6,005	3,237	4,202
Saturday	6,773	12,431	7,265	7,065	5,907	7,279	8,084	6,660	2,164	1,021
Monday	15,398	24,719	11,107	15,101	9,721	15,038	11,432	16,574	8,227	10,328
Tuesday	15,871	24,395	12,938	17,897	13,528	20,182	13,161	16,844	10,001	12,546
Wednesday	14,797	21,037	12,442	16,173	20,502	18,659	10,596	12,533	9,381	11,248
Thursday	10,523	13,616	23,810	17,212	8,713	9,779	3,055	*	6,552	8,450
Friday	15,024	-------	12,103	-------	12,304	-------	5,506	-------	6,691	-------
Totals	91,017	108,634	87,775	80,089	80,319	79,446	55,658	58,616	46,253	47,795

*Show called off on account of rain.

ADMISSIONS TO LIVE STOCK AND HORSE SHOW, IN STOCK PAVILION, 1919, COMPARED WITH 1912, 1913, 1914, 1915, 1916, 1917 and 1918.

	1919	1918	1917	1916	1915	1914	1913	1912
Saturday	1,543	899	758	942	484	806	1,042	-------
Monday	2,357	1,225	2,105	1,581	1,029	957	1,826	1,233
Tuesday	3,016	2,035	2,183	2,107	1,580	2,113	2,472	2,265
Wednesday	2,663	2,003	2,133	1,501	1,242	1,264	1,566	2,070
Thursday	1,662	-------	1,091	667	493	605	438	1,262
Totals	11,241	6,162	8,270	6,798	4,228	5,745	7,344	6,830

The following table gives the number of exhibitors and the number of entries made in each department of the 1918 and 1919 fairs:

Department	1919 Fair		1918 Fair	
	No. of Exhibitors	No. of Entries	No. of Exhibitors	No. of Entries
Horses	94	1,115	97	1,134
Cattle	236	1,998	166	1,345
Swine	314	3,197	214	2,250
Sheep	28	784	25	670
Goats	4	71		
Poultry	132	2,100	97	1,425
Rabbits	33	190		
Agriculture	217	1,869	132	1,898
Pantry	274	2,115	136	1,442
Dairy	48	49	34	34
Horticulture	53	909	28	700
Floriculture	17	443	23	474
Textile, China, etc.	230	1,748	160	1,163
Graphic and Plastic Arts	30	131	30	97
Educational	326	1,082	219	873
Implements and Machinery	338		287	
Totals	2,399	17,801	1,648	13,505

The following tabulation gives the number of exhibitors and the number of horses, ponies and mules entered and the actual number shown at the 1918 and 1919 fairs:

Breed	1919 Fair			1918 Fair		
	No. Exhibitors	No. Horses Entered	No. Shown	No. Exhibitors	No. Horses Entered	No. Shown
Percheron	25	114	73	19	89	67
Clydesdale	11	53	53	7	47	32
Shire	12	64	64	6	30	28
Belgian	15	107	74	16	96	74
Draft	12	36	*	7	19	16
Saddle and Show Horses	27	99	60	20	120	74
Morgan	3	11	11	2	8	8
Shetland Ponies	10	94	75	8	101	83
Welsh Ponies	3	18	12	2	15	8
Hackney Ponies and others	3	13	8	3	15	13
Mules and Jacks	7	66	42	7	53	43
	†94	666	472	97	593	446

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*Counted with draft horses.
†Number individual exhibitors.

The following tabulation gives the number of cattle exhibitors and the number of cattle entered by breeds and the actual number of cattle shown at the 1918 and 1919 fairs:

Breed	1919 Fair			1918 Fair		
	No. Exhibitors	No. Cattle Entered	No. Shown	No. Exhibitors	No. Cattle Entered	No. Shown
Shorthorn	45	264	217	24	166	115
Hereford	17	207	153	11	151	136
Aberdeen Angus	16	123	92	13	108	75
Galloway	----------	----------	----------	1	10	----------
Polled Durham	2	11	11	3	37	37
Red Polled	6	99	66	4	61	30
Holstein	12	164	134	4	60	60
Jersey	6	73	53	2	46	43
Guernsey	6	56	51	6	71	58
Ayrshire	4	52	31	2	47	16
Brown Swiss	3	53	49	----------	----------	----------
Board of Control Cattle	1	35	35	1	40	40
Baby Beeves	118	161	156	95	107	107
	236	1,298	1,013	166	904	717

The following tabulation gives the number of swine exhibitors and the number of swine entered by breeds and the actual number of swine shown at the 1918 and 1919 fairs:

Breed	1919 Fair			1918 Fair		
	No. Exhibitors	No. Swine Entered	No. Shown	No. Exhibitors	No. Swine Entered	No. Shown
Poland China	76	913	863	46	540	479
Spotted Poland China	10	220	148	4	87	66
Duroc Jersey	79	985	900	53	725	681
Chester White	44	686	633	36	530	503
Berkshire	5	154	76	2	2	2
Hampshire	21	500	390	17	405	371
Mule Foot	1	21	21	2	72	57
Yorkshire	4	67	41	3	65	51
Tamworth	4	74	47	2	40	38
Pig Club	70	154	78	49	89	65
	314	3,774	3,197	214	2,656	2,313

The following table sets forth the amount of cash premiums paid

	1919	1918	1917	1916	1915	1914
Horses	$15,635.00	$13,555.00	$13,385.00	$14,412.00	$17,364.00	$18,537.50
Cattle	21,399.20	16,172.55	15,618.25	15,176.00	14,120.00	12,673.25
Swine	8,316.00	6,881.50	6,433.00	4,570.00	4,188.00	4,499.00
Sheep	4,121.00	3,402.00	4,039.00	3,757.00	3,375.00	2,779.00
Goats	219.00	77.00				
Poultry	1,260.00	856.50	1,200.00	1,408.00	1,047.00	1,036.50
Pet stock	86.00	41.50				
Agriculture	6,076.00	5,102.50	6,360.50	6,803.00	6,672.00	5,398.00
Culinary	1,280.00	1,190.50	1,149.50	1,198.50	1,214.50	1,251.00
Dairy	657.00	642.00	657.00	652.00	652.00	652.00
Horticulture	2,373.50	1,993.50	2,086.25	1,905.00	1,759.75	1,680.00
Floriculture	1,733.90	1,533.70	1,553.80	1,447.40	1,575.00	1,535.60
Textile, etc.	1,060.00	1,035.00	1,225.00	1,114.50	1,150.00	1,183.00
Art	626.00	648.00	648.00	662.00	554.00	561.00
Educational	1,401.00	1,563.00	1,442.00	1,288.00	1,133.00	931.00
Scholarships	650.00			421.84	475.00	425.00
Speed premiums	18,144.71	17,555.88	16,544.77	12,145.17	14,319.50	13,283.00
Dog show						
*Baby health						
Spelling contest	100.00	100.00	100.00	100.00		
Team judging	400.00					
Total premiums	$85,538.31	$72,350.13	$72,442.07	$67,060.41	$69,598.75	$66,424.85

*Cups and medals given in place of cash prizes since 1912.

STATISTICAL STATEMENT OF DEPARTMENT 1901 to 1919,

Showing Receipts and Disbursements of Iowa State Fair and Other Improvements, Maintenance Grounds and Buildings, Etc.,

	Receipts						Disbursements	
	Cash Balance Beginning of Year	From State Fair	From State Appropriation	From Other Sources	Total Receipts For Year	Grand Total	Premiums Paid	Other Fair Expenses
1896	$ 116.79	$ 36,622.10	$ 7,000.00	$ 6,710.22	$ 50,332.32	$ 50,449.11	$ 16,404.29	$ 15,351.06
1901	28,616.55	50,712.91	1,000.00	2,753.82	54,466.73	83,083.28	19,203.83	13,925.87
1902	34,244.93	63,084.71	38,000.00	3,037.06	104,121.77	138,366.70	21,736.31	20,073.34
1903	30,372.25	59,838.56	1,000.00	3,140.79	63,979.35	94,351.60	23,813.13	21,989.56
1904	28,963.11	66,100.36	48,000.00	2,622.03	116,722.39	145,685.50	24,691.68	28,485.42
1905	29,657.23	84,786.25	1,000.00	2,840.92	88,627.17	118,284.49	28,730.89	34,408.62
1906	39,976.34	110,929.85	1,000.00	3,717.16	115,647.01	155,623.35	31,703.94	40,315.60
1907	50,294.87	104,356.75	76,000.00	5,452.34	185,908.09	236,103.96	35,504.79	43,647.20
1908	35,227.90	138,764.66	1,000.00	3,262.95	143,027.61	178,355.51	38,744.56	55,848.65
1909	25,328.73	137,307.40	101,000.00	5,257.42	243,564.82	268,893.55	42,262.76	66,963.12
1910	4,985.25	157,250.77	1,000.00	14,658.30	171,918.07	176,903.32	49,717.50	80,513.68
1911	7,283.44	179,549.67	78,000.00	5,275.72	262,825.39	270,108.83	56,264.35	81,603.16
1912	18,036.99	185,701.21	8,000.00	14,579.82	208,281.03	226,318.02	58,139.15	85,829.74
1913	615.63	188,832.10	30,786.81	17,211.86	236,830.77	237,446.40	61,069.90	85,670.12
1914	18,505.82	188,644.66	51,268.19	32,799.93	272,712.78	291,218.60	66,024.85	104,411.33
1915	968.73	165,604.40	36,666.73	51,949.80	264,220.93	265,189.66	69,598.75	101,561.38
1916	100.63	201,381.96	9,133.27	3,366.59	247,165.32	247,265.95	67,060.41	102,137.45
1917	3,998.17	257,122.56	24,832.25	17,341.11	299,295.92	303,294.09	72,442.07	117,091.31
1918	34,822.20	251,196.62	10,900.00	10,313.91	272,410.53	307,232.73	72,350.13	129,739.68
1919	50,486.38	321,574.55	58,741.18	14,075.95	394,391.68	444,878.06	85,538.31	163,542.19

in all departments of the fair for a period of eleven years:

	1913	1912	1911	1910	1909
Horses	$15,612.50	$14,940.00	$14,184.00	$10,381.00	$ 7,273.00
Cattle	12,623.00	11,738.00	12,061.00	11,778.00	10,153.00
Swine	4,404.00	4,042.00	3,640.00	4,135.00	3,035.00
Sheep	2,317.00	2,306.00	2,388.00	2,146.00	2,057.00
Goats	----------	----------	----------	----------	----------
Poultry	1,172.50	1,112.50	1,042.00	1,036.00	988.50
Pet stock	----------	----------	----------	----------	----------
Agriculture	4,173.00	4,059.00	3,524.00	3,074.00	2,976.50
Culinary	1,215.00	1,092.50	856.50	798.00	793.00
Dairy	602.00	627.00	627.00	602.00	596.81
Horticulture	1,614.00	1,139.25	1,115.75	892.00	907.25
Floriculture	1,439.40	1,382.40	1,278.60	945.00	884.20
Textile, etc.	1,658.50	1,662.50	1,744.50	1,753.00	1,812.50
Art	----------	----------	----------	----------	----------
Educational	665.00	430.00	493.00	422.00	261.00
Scholarships	650.00	650.00	850.00	1,000.00	1,000.00
Speed	12,620.00	12,360.00	12,310.00	10,755.00	9,190.00
Dog show	----------	318.00	----------	----------	----------
*Baby health	----------	280.00	----------	----------	----------
Spelling contest	----------	----------	----------	----------	----------
Team judging	----------	----------	----------	----------	----------
Total premiums	$61,069.90	$58,139.15	$56,114.35	$49,717.50	$41,927.76

*Cups and medals given in place of cash prizes since 1912.

OF AGRICULTURE FOR YEARS OF 1896 AND INCLUSIVE.

Sources and Expenditures, Together With Amount Expended for and Net Profit of Fair for Each of the Years Enumerated.

	Disbursements				Cash on Hand	Profits of Fair		
	Improvements and Perman't Repairs	Maintenance of grounds and Buildings	Disbursements Other Than for Fair	Total for Year		Total Receipts of Fair	Total Expenses of Fair	Net Profits
1896	$ 7,471.95	----------	$ 14,019.88	$ 58,247.28	$ 152.84	$ 36,622.10	$ 31,807.35	$ 4,814.75
1901	13,378.73	----------	2,313.44	48,821.87	34,244.93	50,712.91	33,129.70	17,583.21
1902	63,457.12	----------	2,608.69	107,875.46	30,372.25	63,084.71	41,809.65	21,275.06
1903	17,855.77	----------	1,704.88	65,363.29	28,963.11	59,838.56	45,802.69	14,035.87
1904	59,641.11	----------	3,195.43	116,013.64	29,657.23	66,100.36	53,177.10	12,823.26
1905	11,963.09	----------	3,345.27	78,447.87	39,976.34	84,786.25	63,139.51	21,646.74
1906	30,035.33	----------	3,385.87	105,440.74	50,394.87	110,929.85	72,459.39	38,470.46
1907	16,459.05	----------	5,043.03	200,654.07	35,327.90	104,356.75	79,151.99	25,204.76
1908	53,663.69	----------	4,975.50	153,231.98	25,328.73	138,764.66	94,593.21	44,171.45
1909	150,208.58	----------	4,379.91	263,814.37	4,985.25	137,307.40	109,225.88	28,081.52
1910	24,360.98	----------	14,740.26	169,332.42	7,283.44	157,259.77	130,231.18	27,028.59
1911	109,755.04	----------	4,429.29	252,071.84	18,036.99	179,549.67	137,867.51	41,682.16
1912	71,056.56	$ 6,575.51	4,101.43	225,702.39	615.63	185,701.21	143,968.89	41,732.32
1913	51,110.85	7,313.67	13,776.04	218,940.58	18,505.82	188,832.10	146,740.02	42,092.08
1914	100,649.13	7,564.86	11,599.70	290,249.89	968.73	188,644.66	172,113.92	16,530.74
1915	46,138.60	6,770.91	41,019.39	265,089.03	100.63	165,604.40	171,160.13	*5,555.73
1916	10,547.28	3,432.77	60,089.87	243,267.78	3,998.17	201,381.96	169,197.86	32,184.10
1917	38,773.77	8,284.47	31,880.27	268,471.89	34,822.20	257,122.56	189,533.38	67,589.18
1918	30,771.08	12,217.77	11,667.74	256,746.35	50,486.38	251,196.62	202,089.76	49,106.86
1919	105,216.08	21,617.51	12,823.53	388,737.62	56,140.44	321,574.55	249,080.50	72,494.05

*Loss.

STATEMENT OF INSURANCE IN FORCE ON FAIR GROUNDS. BUILDINGS AND DATE OF EXPIRATION.

	Fire	Tornado	Premiums	Expiration
General form on frame buildings	$ 60,000.00	$ 60,000.00	$ 2,400.00	1922
Brick horse barns		9,000.00	45.00	1922
Brick horse barns	14,500.00	14,500.00	425.09	1921
Brick cattle barn No. 1	3,000.00	3,000.00	67.65	1921
Brick cattle barn No. 2	3,000.00	3,000.00	68.25	1922
Transformer station and contents	2,000.00	1,000.00	43.00	1922
Women and Children's building	15,000.00	15,000.00	367.50	1920
Agricultural building	10,000.00	10,000.00	250.00	1920
Administration building and contents	20,000.00	15,000.00	435.38	1920
Stock pavilion	15,000.00	15,000.00	378.69	1920
Machinery hall		15,000.00	75.00	1920
Swine pavilion		13,000.00	65.00	1922
Grand stand		10,000.00	110.00	1920
Farm house	1,500.00	1,500.00	21.87	1922
Farm barn	500.00	500.00	7.13	1922
Brick dining halls	4,000.00	2,000.00	110.00	1921
Street car station		2,000.00	10.00	1922
Sheep barn		13,000.00	71.50	1922
Wilkin's house	800.00	800.00	12.00	1920
Total insurance	$149,300.00	$203,300.00	$ 4,963.06	

REPORT OF TREASURER, W. W. MORROW, AFTON, IOWA.

Mr. President and Gentlemen of the Convention:

In accordance with the wishes of the State Board of Agriculture, I herewith present a report of receipts and disbursements for the fiscal year ending November 30, 1919:

Balance on hand December 1, 1918		$ 53,247.93

Received from ticket sales and cash turnstiles as follows:

Cash turnstiles	$ 67,213.00	
93,154 general admissions @ 50c	46,577.00	
10,570 round-up tickets @ 50c	5,285.00	
13,228 general admissions after 5 p. m. @ 25c	3,307.00	
24,569 children and half fare @ 25c	6,142.25	
2,593 campers' tickets @ $2.00	5,186.00	
1,808 exhibitors' tickets @ $2.00	3,616.00	
45 solicitors' tickets @ $2.50	112.50	
80 auto tickets for week @ $5.00	400.00	
38,855 day grandstand (paddock) @ 25c	9,713.75	
3,672 day grandstand (quarterstretch) @ 25c	918.00	
40,159 day grandstand (reserved) @ 50c	20,079.50	
2,888 day grandstand (box) @ 75c	2,166.00	
65,558 night grandstand (paddock) @ 25c	16,389.50	
36,033 night grandstand (reserve) @ 50c	18,016.50	
2,603 night grandstand (box) @ 75c	1,952.25	
8,084 night stock pavilion (reserve) @ 50c	4,042.00	
2,069 night stock pavilion (standing room) @ 25c	517.25	
Total ticket sales		$211,633.50

Received from Secretary and Superintendents as follows:

Secretary's Department:

Fees Stallion Registration Division	5,039.00
State appropriations	58,741.18
Miscellaneous receipts other than fair	6,496.25
Superintendent of Grounds	1,582.55
Superintendent Horse Department	1,241.00
Superintendent Cattle Department	1,453.50

Superintendent Swine Department	1,273.00	
Superintendent Sheep Department	248.50	
Superintendent Poultry Department	814.25	
Superintendent Machinery Department	9,357.30	
Superintendent Agricultural Department	2,347.50	
Superintendnet Dairy Department	3,316.45	
Superintendent Exposition Bldg	3,085.00	
Superintendent Concessions Department	47,795.15	
Secretary, sale light and power	648.58	
Superintendent of Grounds, Drayage Department	1,076.50	
Superintendent Speed Department	5,654.81	
Superintendent Forage Department	16,995.70	
Secretary Association Special Premiums	10,504.30	
Secretary, advertising in premium list	1,347.50	
Secretary, advertising in catalog	1,860.00	
Secretary, miscellaneous receipts of fair	922.01	
Interest on daily balance	958.15	
Total receipts other than ticket sales		$182,758.18
Grand total receipts		$447,639.61

DISBURSEMENTS

Expense warrants paid	$303,032.43	
Premium warrants paid	84,724.36	
Total disbursements	$387,756.79	
Balance on hand November 30, 1919	59,882.82	
To balance		$447,639.61

Respectfully submitted this 10th day of December, 1919.

W. W. MORROW, Treas.

December 4, 1919.

To the Directors of the State Board of Agriculture:

Gentlemen: This is to certify that there was on deposit at the Central State Bank on November 30, 1919, a time deposit of $40,000.00 and a balance to the credit of W. W. Morrow, Treasurer of the Iowa Department of Agriculture, the sum of $19,881.67, also a credit on December 2, of $1.15, making a total credit of $59,882.82.

Yours very truly,
J. W. HAWK, Assistant Cashier.

INVENTORY STATE FAIR PROPERTY.

	Value Nov. 30, 1918	Depreciation deducted 1919	Improvements Added 1919	Value Nov. 30, 1919
Real estate	$ 459,076.19	$	$	$ 459,076.19
Real estate carrying account	36,407.04		86,559.84	122,966.88
Light and telephone system	18,808.38	945.04	1,967.79	19,831.13
Personal property—				
Administration Bldg. furnishings	2,990.28	149.51	874.54	3,715.31
Amphitheater chairs	3,159.60	157.98		3,001.62
W. & C. Bldg. furnishings	3,535.56	176.78	128.50	3,487.28
Building fixtures (general)	2,074.94	103.75		1,971.19
Office furniture (general)	942.54	47.13	83.03	978.44
Agricultural Bldg. fixtures	2,590.43	77.71	101.78	2,614.50
Tools and implements	12,491.29	756.56	1,503.08	13,237.81
Live stock (mule team)	440.00			440.00
Supplies, lumber, etc	5,164.52	258.23		4,906.29
Scales	203.63	106.91		96.72
Pumps	100.87	5.04		95.83
Buildings—				
Administration Bldg	35,807.47	437.11	337.86	35,708.22
Agricultural, Horticultural and Dairy Bldgs	45,452.20	681.78	986.21	45,756.63
Amphitheater	95,271.31	952.71	53.30	94,371.90
Art Hall	464.26	23.21		441.05

	Value Nov. 30, 1918	Depreciation deducted 1919	Improvements Added 1919	Value Nov. 30, 1919
Auto garage	43.45	2.17		41.28
Boys' and Girls' Club Bldg.	2,861.92	85.86	10.80	2,786.86
Bleachers	6,549.59	1,571.91	4,223.87	9,201.55
Band stand	239.70	11.98		227.72
Barber shop	136.48	13.65	5.00	127.83
College Bldg.	5,896.16	176.88	95.14	5,814.42
Cattle barn No. 1	4,118.86	61.78		4,057.08
Cattle barn No. 2	5,035.89	75.54		4,960.35
Cattle barn No. 3	2,176.22	65.29		2,111.33
Cattle barn No. 4	5,597.05	83.96	138.22	5,651.31
Speed barn A	601.11	18.03		583.08
Lumber shed	601.11	18.03		583.08
Lumber shed	601.11	18.03		583.08
*Cattle barn No. 8	601.11	601.11		
Nurse cow barn No. 1	601.11	18.03		583.08
Nurse cow barn No. 2	601.11	18.03		583.08
Nurse cow barn No. 3	601.11	18.03		583.08
Nurse cow barn No. 4	601.11	18.03		583.08
Nurse cow barn No. 5	601.11	18.03		583.08
*Cattle barn No. 14	610.73	610.73		
*Cattle barn No. 15	610.73	610.73		
Nurse cow barn No. 6	601.11	18.03		583.08
*Cattle barn No. 17	270.83	270.83		
*Cattle barn No. 18	270.83	270.83		
*Cattle barn No. 19	270.83	270.83		
*Cattle barn No. 20	177.15	177.15		
*Cattle barn No. 21	177.15	177.15		
*Cattle barn No. 22	243.10	243.10		
*Cattle barn, washstands, etc.	38.38	38.38		
Closet No. 1	292.66	11.71		280.95
Closet No. 29	301.83	12.07		289.76
Closet No. 18	2,803.53	112.14		2,691.39
Closet No. 6	119.18	5.96		113.22
Closet No. 23	2,668.59	106.74		2,561.85
Closet No. 27	166.16	8.31		157.85
Closet No. 19	2,746.60	119.86		2,626.74
Closet No. 25	194.91	9.75		185.16
Closet No. 26	161.41	8.07		153.34
Closet No. 17	136.15	6.81	143.63	272.97
Closet No. 28	166.16	8.31		157.85
Closet No. 24	247.33	12.37		234.96
Closet No. 20	166.16	8.30		157.86
Closet No. 14	211.29	10.56		200.73
Closet No. 30	49.65	4.96		44.69
Closet No. 31	12.46	1.25		11.21
Closet No. 21	33.12	3.31		29.81
Closet No. 32	66.59	6.66		59.93
Closet No. 22	56.99	2.85		54.14
Cattle barn (new)			55.74	55.74
Closet No. 33	644.51	25.78		618.73
Cottage No. of Sims house			300.00	300.00
Cottage E. of Sims house			508.00	508.00
Chicken coop, Sims land			250.00	250.00
Dining halls, brick	8,798.62	175.97	181.66	8,804.31
Dining hall, Grand Ave.	6,030.66	180.92		5,849.74
Dining hall, speed barn	148.48	7.42		141.06
Dwelling house, Sims land			750.00	750.00
Exposition Bldg.	13,508.70	540.35	10,386.62	23,354.97
Farm house	3,367.30	134.69	188.71	3,421.32
Farm barn	1,223.06	48.92		1,174.14
Floral Hall	1,801.69	180.17	31.50	1,653.02
Forage barn	1,745.15	69.81		1,675.34
Forage barn, camp grounds	77.38	42.56		34.82
Fire station	562.58	16.88		545.70
Flag pole	439.99	4.40		435.59
Game farm cottage	695.46	27.82		667.64
Grocery store	466.11	23.31	2.22	445.02
Grand Ave. entrance	1,450.99	21.76	2,530.49	3,959.72
Horse barn, brick	48,841.02	732.62	277.80	48,386.20
Horse barn No. 1	1,749.16	52.47		1,696.69
Horse barn No. 2	1,311.91	39.36		1,272.55
Horse barn No. 3	1,749.16	52.47		1,696.69
Horse barn No. 4	1,574.41	47.23		1,527.18
Horse barn No. 5	1,574.41	47.23		1,527.18
Horse barn No. 6	1,486.93	44.61		1,442.32
Horse barn	1,198.66	35.96		1,162.70
Hospital	752.57	22.56	11.45	741.46
Ice house	280.33	14.02	40.00	306.31
Ice house (new)			260.14	260.14
Judges' stand	246.47	2.46		244.01

	Value Nov. 30, 1918	Depreciation deducted 1919	Improvements Added 1919	Value Nov. 30, 1919
Judges' stand, show ring	13.12	1.31		11.81
Lumber shed	330.51	16.53	103.00	416.98
Machinery Hall	81,267.65	1,219.01	74.55	80,123.19
Meat market	201.81	20.18		181.63
Mines & Mining Bldg	453.94	13.62		440.32
Office Bldg. No. 1	77.38	3.87		73.51
Office Bldg. No. 2	320.80	12.83		307.97
Office Bldg. No. 3	154.75	7.74		147.01
Office Bldg. No. 4	77.38	3.87		73.51
Office Bldg. No. 5	77.38	3.87		73.51
Office Bldg. No. 6	205.71	10.29		195.42
Office Bldg. No. 7	264.32	13.22		251.10
Office Bldg. No. 8	305.85	15.29		290.56
Office Bldg. No. 9	104.78	5.24		99.54
Office Bldg. No. 10	299.21	14.96		284.25
Office Bldg. No. 11	143.46	7.17		136.29
Office Bldg. No. 12	199.81	9.99		189.82
Office Bldg. No. 13	309.55	12.38		297.17
Office Bldg. No. 14	205.40	10.27		195.13
Office Bldg. No. 15	30.95	1.55		29.40
Office Bldg. No. 16	134.37	6.77		127.60
Poultry Bldg.	7,914.35	316.57	31.91	7,629.69
Power Hall	5,933.60	237.34	5.00	5,701.26
Postoffice	341.72	13.67		328.05
Police headquarters	386.90	19.35		367.55
*Police barn No. 1	59.05	59.05		
*Police barn No. 2	29.52	29.52		
Paddock	8,938.81	178.78	10.80	8,770.83
Rock Island entrance	259.82	12.99	8.56	255.39
Swine Pavilion	75,294.42	1,129.42	110.44	74,275.44
Stock Pavilion	36,760.47	551.41	27.50	36,236.56
Street car station	8,021.33	80.21	27.27	7,968.39
Speed barn No. 1	1,088.98	32.67		1,056.31
Speed barn No. 2	1,088.98	32.67		1,056.31
Speed barn No. 3	1,088.98	32.67		1,056.31
Speed barn No. 4	1,088.98	32.67		1,056.31
Speed barn No. 5	1,088.98	32.67		1,056.31
Speed barn No. 6	1,088.98	32.67		1,056.31
Speed barn No. 7	1,088.98	32.67		1,056.31
Speed barn No. 8	907.47	27.22		880.25
Speed barn No. 9	907.47	27.22		880.25
Speed barn No. 10	907.47	27.22		880.25
Speed barn No. 11	604.55	24.18		580.37
Speed barn No. 12	561.36	22.45		538.91
Sheep barn	25,250.59	505.01	158.06	24,903.64
Shaver Carriage Bldg	2,752.25	55.05	87.50	2,784.70
Telephone station	642.88	19.29		623.59
Ticket booth No. 1	11.62	.58		11.04
Ticket booth No. 2	11.62	.58		11.04
Ticket booths Nos. 4 and 5	77.38	3.87		73.51
Ticket booths Nos. 6 and 7	77.38	3.87		73.51
Ticket booths Nos. 8 and 9	77.38	3.87		73.51
Ticket booth, Grand Ave.	58.04	2.90		55.14
Ticket booth, Grand Ave.	19.36	.97		18.39
Ticket booth, quarter stretch	7.69	.38		7.31
Ticket booth, amphitheater	25.81	1.03		24.78
Ticket booth, amphitheater	47.07	1.88		45.19
Ticket booth, amphitheater	32.97	1.32		31.65
Ticket booth, amphitheater	47.07	1.88		45.19
Ticket booth, reserved seats	34.78	1.39		33.39
Ticket booth, Stock Pavilion	28.54	1.14		27.40
Ticket booth, Rock Island.	61.16	2.45		58.71
Ticket booth, Rock Island.	20.39	.82		19.57
Ticket booth, amphitheater paddock	23.16	1.16		22.00
University Ave. entrance			52.67	52.67
Vaudeville stages	1,807.97	72.32	9.19	1,744.84
Women & Children's Bldg.	76,816.80	1,152.25	206.48	75,871.03
Women & Children's Bldg., hospital	91.91	4.60		87.31
Walnut St. entrance	1,302.09	19.53	20.17	1,302.73
Building carrying account.	834.39		598.05	1,432.44
Total	$1,229,432.74	$19,766.71	$114,518.07	$1,324,184.10

*Wrecked 1919.

IOWA STATE FAIR BALANCE SHEET, NOVEMBER 30, 1919.

RESOURCES.

Real estate	$582,043.07	
Buildings	687,764.91	
Light and telephone plant	19,831.13	
Personal property	34,544.99	
		$1,324,184.10
Accounts receivable		2,839.08
Cash balance in treasury November 30, 1919		56,140.44
Total resources		$1,383,163.62

LIABILITIES.

Accounts payable		$ 140.24

SURPLUS.

State appropriation for frame buildings, 1885	$ 50,000.00	
State appropriation for real estate	84,611.47	
State appropriation for permanent buildings since 1902	446,000.00	
Increase in value of real estate and profits of fair invested in permanent improvements	802,411.91	
Total surplus		$1,383,023.38
		$1,383,163.62

We will now listen to the report of the crop service bureau on the final crop estimate for 1919, by Charles D. Reed, director of the Iowa Weather and Crop Service Bureau.

Charles D. Reed, director of the Iowa Weather and Crop Service bureau:

It seems like a very opportune moment for a weather man to appear before you, inasmuch as we have broken all records for this time of the year for low temperature, having 19 below zero at 7:00 o'clock this morning. It is now about 12 below. However, there are better things in sight and it looks as though we will have a slight moderation. I don't think it will be down below zero tonight.

FINAL CROP REPORT OF THE STATE, 1919.

Beginning with this, the final crop report for 1919, the Iowa Weather and Crop Service as a state organization and the U. S. Bureau of Crop Estimates as a federal organization working in Iowa have combined all data to make one harmonized report of acreage and yield. This has necessitated a revision of the county and total acreages of some of the crops published by the Iowa Weather and Crop Service earlier in the season. For this reason comparisons with previous years' acreages of the various crops is impracticable this year. The prices here quoted were compiled by the Iowa Weather and Crop Service independently. This report does not include or take into consideration live stock, poultry or dairy products.

Corn.—The estimated acreage was 10,000,000; average yield, 41.6 bushels per acre; total yield, 416,662,000 bushels; average price, $1.17 per bushel; total value, $487,447,000. Only 2 per cent of the crop was reported to be soft or immature and 89 per cent had been husked on December 1st. The total bushels of sound corn in Iowa this year are the greatest on record. The quality is generally excellent.

Oats.—The estimated area harvested was 5,670,000 acres; average yield, 34.6 bushels; total yield, 196,391,500 bushels; average price, 64 cents; total value, $125,690,560.

Spring wheat.—Area harvested, 750,000 acres; average yield, 9.5 bushels per acre; total yield, 7,145,300 bushels; price per bushel, $1.89; total value, $13,504,617.

Winter wheat.—Area harvested, 950,000 acres; average yield per acre, 17.4 bushels; total yield, 16,508,000 bushels; average price, $1.98 per bushel; total value, $32,687,028.

Barley.—Area harvested, 315,000 acres; average yield per acre, 25.5 bushels; total yield, 8,022,800 bushels; average price, $1.11 per bushel; total value, $8,905,308.

Rye.—Area harvested, 70,000 acres; average yield, 15.9 bushels; total yield, 1,110,050 bushels; price per bushel, $1.33; total value, $1,476,366.

Flax seed.—Average yield, 9.5 bushels; total yield, 152,275 bushels; total value at $3.90 per bushel, $593,872.

Timothy seed.—Area harvested, 200,000 acres; average yield, 4.5 bushels; total yield, 900,000 bushels; total value at $4.91 per bushel, $4,419,000.

Clover seed.—Area harvested, 60,000 acres; average yield, 1.4 bushels; total value at $24.92 per bushel, $2,093,280.

Potatoes.—Area harvested, 115,000 acres; average yield, 43 bushels; total yield, 4,942,110 bushels; average price, $1.94; total value, $9,587,693.

Hay (tame).—Average yield, 1.6 tons per acre; total yield, 4,957,370 tons; average price, $18.37 per ton; total value, $91,066,887.

Hay (wild).—Average yield, 1.3 tons; total yield, 631,693 tons; average price, $16.48; total value, $10,410,301.

Alfalfa.—Area harvested, 148,000 acres; average yield, 3.2 tons; total yield, 477,314 tons; average price, $23.09 per ton; total value, $11,021,180.

TABULATED CROP SUMMARY, 1919.

Crop	Acres	Average Yield	Average Price	Total Yield	Total Value
Corn	10,000,000	41.6 bu.	$1.17	416,622,000	$487,447,740
Oats	5,670,000	34.6 bu.	.64	196,391,500	125,690,560
Spring wheat	750,000	9.5 bu.	1.89	7,145,300	13,504,617
Winter wheat	950,000	17.4 bu.	1.98	16,508,600	32,687,028
Barley	315,000	25.5 bu.	1.11	8,022,800	8,905,308
Rye	70,000*	15.9 bu.	1.33	1,110,050	1,476,366
Flax seed	16,000	9.5 bu.	3.90	152,275	593,872
Timothy seed	200,000	4.5 bu.	4.91	900,000	4,419,000
Clover seed	60,000	1.4 bu.	24.92	84,000	2,093,280
Potatoes	115,000	43.0 bu.	1.94	4,942,110	9,587,693
Hay (tame)	2,992,000	1.6 tons	18.37	4,957,370	91,066,887
Hay (wild)	478,000	1.3 tons	16.48	631,693	10,410,301
Alfalfa	148,000	3.2 tons	23.09	477,314	11,021,180
Pasture and grazing (estimated)					100,000,000
Ensilage (estimated)					20,000,000
Sweet corn (commercial crop)	40,000	3.0 tons	13.50	120,000	1,620,000
Pop corn (estimated)	29,300	24.9 bu.	3.79	729,570	2,765,070

Buckwheat (estimated)...	7,000	14.0 bu.	1.95	98,000	191,100
Fruit crop (estimated)....					7,000,000
Garden truck (estimated).					8,000,000
Sugar beets for manufacture (estimated)	8,000	8.0 tons	10.00	64,000	576,000
Miscellaneous (estimated).					11,000,000
Total value					$950,056,002

*For grain only; does not include approximately 40,000 acres used for pasture.

The Chairman: We will now listen to an address entitled "Projects for Junior Clubs," by P. C. Taff, state club leader, of Ames, Iowa.

P. C. Taff, Ames, Iowa:

Mr. President and Gentlemen:

I am very glad to have this opportunity of presenting the boys' and girls' work to you, for a number of reasons. First, because I am glad that your program committee has seen fit to include this very important line of work in their program, and second, because it gives us an opportunity to come together and discuss in a definite way some of the things we need to do and need to act upon.

I think you see that in the many changes which are coming about in your fair work, that the boys' and girls' part is assuming very large proportions. I was very much pleased that your president in his splendid address a while ago dwelt upon that point. I think you have noticed that the state fair has come forward in the matter of taking care of the boys and girls in their work in a very splendid way in the past few years, and we are very glad to note from the remarks of the president that they still have greater plans for them in the years to come.

I do not need to take your time to emphasize the importance of this line of work. I believe that you all realize that. I think that any lack of co-operation on the part of the local fairs has been due, probably, to the lack of a plan, something definite that you could work up and go ahead with, and we hope that if our co-operation can do any good for you that you will give us the opportunity to more definitely put the club work into your programs for this coming year. I do not believe I need to discuss, as I have said, the importance of the work. We have around 450,000 boys and girls in the state of Iowa of club age—that means between the ages of 10 and 19. Now, certainly those boys and girls are a factor that you cannot afford to overlook in any line of educational endeaver, and, remember, we look upon the club work as educational work, bringing in, of course, a number of other things that I will mention later. It is an important work, and these boys and girls in Iowa, particularly those on the farms, are entitled to the very best that you can give them in your fairs, or any other line of educational work that you are doing. The schools, of course, are filling the big need in an educational way, and the club work does not take the place of school work, it simply supplements, it adds to the school work something it has not had in the past.

I want to outline the purposes of club work in order that we may all have the same understanding regarding what we are trying to do. It has always been a common impression among the older people, I think—I know I was that way before I became acquainted with club work—that anything connected with boys and girls in the fairs or institutes, or places of that kind, was more or less "kids' play," as they called it, and really wasn't a job that older people were interested in. I am glad to say that this impression is being overcome very rapidly. I want to say that the boys' and girls' work is a big enough problem that any one can work at it and not be ashamed of what they are trying to do. There are certain definite things that we have in mind when we talk of boys' and girls' club work, and I trust that you will take home, as part of your plan, these three things, at least:

In the first place, when you attempt to do boys' and girls', or junior work, you want the boys and girls in that work to do something worth while. You don't want them, as you might say, to fool around with something that is not worth while; you want them to feed a calf or feed a pig, or grow an acre of corn—something worth while, and that is just one principle of club work.

The second one is that they shall demonstrate to the community the something they are doing. That is really where the fair can play an important part. The young people are urged to demonstrate, not to set themselves off and do only the thing which they are asked to do in the club work, but to demonstrate that thing to the community.

The third principle that we try to put into the work is something of the social side. That is, club work provides a means so that the boys and girls get together and study things in which they are interested. They have clubs, which are always formed in convenient groups, and these groups are asked to get together as often as they can when the club is in operation, probably once a month. In that way they get the social as well as the educational advantages. We all know that there is nothing more needed in the rural communities than that very thing. There is nothing that will put life in your boys' and girls' work better than to get them together in a group and talk over and discuss their work, and then have a play period.

Those three things, then, are always emphasized in club work. The first, doing something worth while; the second, demonstrating something to the community; and the third, putting something of a social nature into the club work.

Club work simply means the organizing of a group of boys or girls to study the same subject. Our club work has gone very largely to the organization of rural clubs, though some of the clubs are largely town clubs, such as poultry and garden clubs.

Some have the impression that they must show results out of club work in dollars and cents. We realize that this is an important feature and that unless the boys and girls show dollars and cents value, the work will not be supported. But that is the lowest measure of value you can put on the work. However, if you took only the dollars and cents value in club work, in this past year for every dollar spent by every agency in the state there was practically $28 produced by the boys and girls in their work. If you want to look at it that way it would be a paying proposition. You cannot emphasize too much the further benefits of club work.

In the extension service we are coming to realize more and more that one of the very best ways of reaching the older people, reaching the farmers and the farm homes in this state, is through the boys' and girls' work. Possibly you have noticed in your own community that you can interest the boys and girls in better live stock, better crops, better methods, and that for a while possibly the parents are very luke warm about the proposition, but we have hundreds of cases where the boy or girl has demonstrated to the father or mother the way that they are doing is better, and the parent has become converted and has adopted the better way. In that way the club work has an almost inestimable value in educating the farmers of the state. I hope you will keep that in mind in putting on club work in your communities.

I haven't time to explain further, I am sorry, some of the results that have been secured from club work. But I want to mention just one of them that stands out quite prominently, as an illustration, and I could cite a good many others. Over in Jackson county two years ago they put one of the calf clubs, using pure-bred calves. That club started and was operated with about 50 members. The records show that after that club had been in operation only a year, 22 pure-bred herds were started from the work of that club alone. That is just an illustration of the advantage that can come to the community from a club of this kind.

One of the reasons why we are bringing this matter of club projects up before you at this time is our attempt to broaden this work. With all of the club work that the county agents and all others have been doing this past year, only about 5 per cent of the boys and girls of the state had an opportunity to receive any of the benefits. This is a very small percentage and if it is a good thing for 15 or 20, or even 50, boys and girls of a county to become enrolled in club work, it is certainly good for the other 4,000 to 5,000 of club age in that county. As one of the agencies in your county, your fair can help reach and help to broaden, and thereby reach boys and girls that need that kind of work. We need all of the agencies working together, and yours is one that we want to co-operate. We want to co-operate with the schools, because that is an agency that is already existing and reaching a large per cent of the boys and girls of club age. We want to co-operate with all other such agencies of the state.

One of the things that I want to emphasize to you men, as fair managers, is the matter of considering this work early. Unfortunately, it is not a kind of work that you can start on in May, June or July and put into your fairs in an effective way the coming fall. It needs to be started early in the season to be successful.

We have quite a large number of clubs covering the various phases of agricultural work that we have already organized in this state. Probably some of the best known and some of the clubs that are best adapted to fairs are the animal clubs. In these we include the beef calf clubs, the pig clubs, the dairy calf clubs, poultry clubs and various other clubs which may be included. The baby beef and pig clubs have been the ones in which we have had the largest numbers enrolled. It is too late to start one of the calf feeding clubs for the fairs this coming fall. The feeding in these should start by the first of November, if you are putting on a calf contest such as was shown at the state fair last fall. If you are too late for that this year, I bring it to your attention now so that you can start early next year. It is not too late to start the pure-bred calf club. The pig club can, of course, be started along in the winter and spring months, depending upon whether you are starting a market or a pure-bred pig club. The poultry club can also be started in the spring and an exhibit put on at the county and state fairs. We also have the corn clubs, garden clubs, and the canning and food and garment clubs for the girls, and one other club, the judging contest club. We hope by having community contests and then a county fair contest, we will have the boys study the judging of live stock and in that way make it productive as well as the other clubs.

Those are just briefly some of the different clubs which have been organized and carried out, and I won't discuss them any more in detail because you can secure information with regard to them from the county agent, I think, in all cases, and we would be glad to supply additional information if needed. I want to emphasize one thing, if I may be put in the position of giving suggestions and not making criticisms, in your classifications. We find it takes more than putting up premium money for the club work in order to have a successful exhibit or demonstration. It is too often the tendency to put up so many dollars in prizes and expect the exhibitors to come. They don't do it in club work, and I don't think you find it any more successful in other lines of work. It is necessary to push this kind of work, and it is necessary to give the boys and girls an opportunity to get into that kind of work by having clubs formed at a previous time. It is this one thing that I want to emphasize more than another—start out and make your plans early and then follow them up. My suggestion to you in carrying out this work would be simply this: When you return home, at the first opportunity get in touch with the county agent or leader of your county and go over with him the lines of work that he is already doing and that he can do this coming spring in order to help put on the exhibit and demonstrations at your fair. Go over it thoroughly with him, because the county agents have already selected certain projects, and by going to him and co-operating with him I think you will find enough phases of work being conducted already to provide demonstrations for your fairs this fall. We do not put on club work except at the call of the farm bureaus of the county, and then we only furnish whatever help is needed. This year, if the county is putting on a calf club, it will be necessary to have an opportunity to show the calves somewhere. If your fair is held at an opportune time, it will make one of the most interesting exhibits and demonstrations at your fair you can find. If Mr. Clarke or some of the men from the Marshall county fair are here today, I believe they will bear me out in that statement, for one of the very best exhibits that they had at their county fair was with the baby beef club. Many other fairs find this work developing very rapidly. As you know, the Interstate Fair at Sioux City is making club work one of its big features, and I think that you can co-operate in a similar way in the county fair work. It will draw attention and draw people, and it will put into your fair a thing that you are working for, namely, a feature that is educational, something that the older people will be interested in. I venture to say that you can put on a good boys' calf class or pig class at the fair and you will not find any more ringside spectators at any judging work than right there. If a boy is interested and has an exhibit there, it draws his parents, his neighbors and others who will come to find out what Johnny wins.

I don't think it is necessary to take any more of your time, other than to say again that the county agent has information with regard to what is being done in club work, and if you go to him you will find what classes can be provided for your fairs. I want to emphasize again the effort necessary on your part to follow up the work with the assistance of the agent in getting out the exhibit and in putting on the demonstration.

I have spoken here more of the boys' clubs, clubs that the boys usually enroll in, though, as you know, girls come into them, too, and they are often successful because they use great care, sometimes greater care than the boys do. But we have a number of clubs that are purely girls' clubs. If you can put on demonstrations with girls' canning teams, or garment making teams, or food teams, you can develop a great deal of community spirit and interest. If in the girls' club you can get a canning demonstration in each township, a team from each township to represent the township at the county fair, you will find it to be a big drawing card and educational feature for you. It interests a lot of people for you, it creates a sort of rivalry among the people of the townships, and by organizing these teams early, getting them trained so that when they go into the county contest they can put on a really effective demonstration. The same thing is true of the food preparation team, the bread baking contest, and so on. There is a lot of work on the girls' side that I hope you will not overlook.

If there is anything that we can do in the matter of providing uniform classification, we would be glad to do that, because uniformity in these things is always of benefit. We will do that through our county agents, because we will provide them with whatever information or methods we have worked out.

I thank you for your kind attention.

The Chairman: We will now be favored with a solo by Miss Lillian Jacobson of the T. Fred Henry Band.

A few years ago the women of the state of Iowa came to the management of the state fair and requested, if it were possible, that a women's and children's building be provided upon the fair ground. The board took the matter under consideration; they knew that probably it would be a pretty hard task to get an appropriation from the legislature of the state of Iowa, because you know it is pretty hard to get appropriations, but the women of the state stood back of us on the proposition and we had the bill introduced. With the hearty co-operation of the women of the state of Iowa the legislature made an appropriation of $75,000 to build this building, a building which cost us when completed something like $85,000. We have the distinction of having the largest Women's and Children's Building on any fair ground in the United States. Two years ago a delegation from the Canadian fairs visited all of the fairs in the United States. I met a number of that delegation last week, the first time I had met any of the gentlemen since they visited our fair, and he told me that of all the fairs they visited and inspected, not only had Iowa the finest building, but it had the best program and that one of the most interesting departments of any fair they visited was the Women's and Children's Building at the Iowa State Fair.

We have with us this morning one whom I take great pleasure in presenting to you, a lady who, since this building has been thrown open to the public, has been an untiring worker in providing the program and through her efforts and the efforts of her associates we have been able to present the results that these Canadian gentlemen have referred to. I now take great pleasure in introducing to you Mrs. W. H. Snider, of Des Moines.

Mr. Chairman and Gentlemen:

The women of Iowa are very proud of that Women's and Children's Building. They were interested in getting it, and they are interested now in having it used in the best possible way so that it will really bring results. It seems to me that the state fairs and the county fairs offer the very best possible opportunity for educational work, and I am sure we are all agreed that this is the object of having these fairs. We don't have them just for our program, but something that will reach the people that will really do some good. The women of Iowa as a whole are interested in certain things. The rural women may have some special interest, and the city women may have some special interest, but there are certain interests in which all the women are interested. While you men are giving your time and your thought and your very best brains to the matter of production and to business and to making things go in the country, the women of the country must think of the standards we are setting up in the home and the community, and they are really giving the best of thought to those things, but the very nature of their position leaves them but little time for the study of these problems. The women whom you sometimes call the leisure class have the time for this, and so among the women of the city we have a great body of women we call club women. Some years ago men did not understand just what club women were. They thought they were just groups of women each trying to put over their own program; but let me tell you that the club women of the United States are a tremendous force. The club women are thinking not of themselves, but of the community, just like your commercial clubs and greater city committees, so are the club women thinking of the community. And so I would say to you today, in planning your fairs, give some thought to the club women and the value they can be to you in reaching women. They are interested in many things and can give you valuable assistance, but the time has gone by when you can get a crowd of people at a fair just to look at fancy work and cross stitching, and that sort of thing. They are all right and they have their place in the homes, but women are interested in many other things. It seems to me that we should be careful in making our plans to make them interesting to both the city and the country women. Our interests are one, we are learning that more and more. We no longer have class interest; there is no town interest or country interest—it is all one. If you can get the leading women in your community, the women of influence and prestige, if they will get in and help you in this thing, you will be able to build a constructive program that can be developed from year to year. There are 20,000 club women in Iowa in the federation; there are over 700 clubs; there are, I think, only three counties in Iowa that don't have a federated club. There are some good clubs that aren't federated, but when they are federated they are in touch with all the work that we as club women try to do. They are not working at random; they have eleven definite committees with many sub-committees. We have five counties where there is a county federation, meaning that all of the women's clubs in the county are federated—that is, city and country club women—and we have fifteen cities where all the clubs in the city are federated, so that they are all pulling together.

When this committee in the Iowa Federation was asked to take over the program at the state fair, it was an entirely new project, we didn't know just what we could put on, or just what we could do, but we did know that women were interested in certain vital things. We knew that the club women had a program that other women would like if we could get it to them, so we approached the matter with open minds. We went in and studied the crowd and studied the people, and we soon found that there was a very great difference in the crowd than was to be found anywhere else. We found that they came to be amused, and they came to be entertained, and when they got there we wanted to give them something that they would see the value of and at the same time they would be interested and amused, because we wanted to interest, we wanted to educate, we wanted to give them recreation and wanted to give them amusement—and how could we do all those things? The first thing we learned was to visualize those things. You cannot hold them for very long at a time if it is undemocratic, so we finally worked out our program. Women want to learn; there are lots of things that they want to learn, and the rural women want to learn what the city women are interested in. They want to learn it just exactly as the city women want to learn it, but it seems to me that the ideal program is one that will interest at the same time both classes of women. Whatever is put on must be well put on, it must not be done in a second-rate way. You may make it go for a moment, but you cannot put on a constructive program that will draw your women year after year unless it is well done.

When we started to plan our program at the state fair, we felt we would take one thing at a time and develop that. The first year was spent in developing pageantry. We believed that everybody would be interested in it—the little story in song and dance—and we did that not only for them to see, but because we wanted to get over to them that pageantry was a good thing, that it would work for civic value and civic spirit. And so we put on these small pageants, during the first year, and we had someone explain to them afterwards how they could put on these things in their own home town. Gradually we developed it, and the next year we expanded the idea. By the way, we have pageantry as part of our club work, because we believe that it has an educational value. Mr. Corey had the idea that a style show would be a very attractive thing in the building, and he presented it to the committee. I didn't say much when he spoke to me about it, because I thought I would want to think it out very carefully first. While a style show might be made a very instructive and attractive feature, we took the matter under advisement. We immediately got in touch with the department at Ames, because we wanted to make it really worth while, and after giving considerable time to it we were able to really work out something that was effective and was satisfactory, and from our success at the last fair I think we were justified in that. So we put on this style show, which was really a very valuable feature of our work. We used the term "style show" because that would rather catch the public eye, and we put on daily demonstrations in better standards of dress. We had living models; we had garments well cut, well made, that were suitable to the purpose; we showed garments suitable for the children, for high school girls, college girls, and women in every walk of life. Women are always interested in those things, especially when they know that it is something that is standard and can be relied upon. We developed that feature even more this year, and we put on two style shows each day, one in the morning and one in the afternoon. The one in the morning was especially to help the home dressmaker, and they were shown models and shown how to make those garments. They were shown how to use commercial patterns and how to cut. The afternoon program was designed to help the shopper, to teach her something of the values, and of course for this we had fine co-operation from Ames College. We also had a valuable thing from the standpoint of the success of the undertaking. We had the co-operation of some of the big stores in Des Moines—they let us have practically everything that we wanted in the way of garments. We had a number from Harris-Emery's, from Younker's, and from the Blouse Shop, and others of that kind. They gave us materials and hats and pictures, and for that we gave them credit, in the way of personal mention. That made for a certain amount of good feeling between the community and the fair, because it gave a certain amount of advertising to the stores, and they knew that while we were putting on a style show it was something that wasn't in opposition to their business.

Another thing that the women's clubs are doing is co-operating with whatever the government is putting on at large. During this last year the thrift movement was one of the things that we were asked to get back of, and to further that work we put on a little comedy that was written especially for this use by a young dramatist in the high schools of Des Moines. It was called "The Thrift Shop Musical Comedy." Its setting was a little beauty parlor, and there they showed many extravagances. It was very clever and up to the moment, had very pretty music in it, and that was staged every day. The room never held the people who wanted to see this program. Then, too, we have continued each year the pageantry. Last year we presented a pageant called "Iowa's Wild Flowers" and this year followed it with a pageant called "Indian Corn." Its setting applies particularly to Iowa and it was a very lovely thing and a very artistic thing. It was put on by children of Des Moines and the children of the surrounding towns. Now, these were the distinct things that we have put on, and, as I say, the room would never hold the people. I think it seated about 500 people and I think we had in about 700 people at all times. The women come there not just because they have a good program, but because they are vitally interested in these things. All these little pageants can be put on at the county fair. The little drama oftentimes can be put on and the style show, as we have demonstrated, can be put on in a small way. We have also put on in Iowa during the past year what we called a two-day thrift meeting, sometimes with the co-operation of local merchants and sometimes with garments made in the schools in the home economics departments. It seems to me that we do not use as fully as we should the state aids. Of course, we use the home demonstration agents, and they are our very best help in this sort of thing, but we don't use them as we should. In Scott county there is such a fine spirit of co-operation that a woman is hired by the farm bureau and the women's club in co-operation, each paying one-half of her support. That woman has the club women back of her and she is working with them and she is also working with the rural communities, which is also a very fine thing. I believe we should use these programs to draw the rural women and the city women together. I believe we should use some of the local women and some of the country women on the program and then it is especially interesting to get women from the outside to come and address the meetings, women of whom these local members have read but have not seen, and they can put over a message there that you couldn't get over by using all local people. Of course, these things must be financed. I think a great deal of our success in connection with our undertakings at the state fair has been due to the vision of your committee, who have believed that those were the worth-while things, and have been able to finance them properly. But the day has come when the work of the women must be financed just as the work of the men. There was a time when the women who put on the work without financial support, and you can get women who will help you if you cover the expense in the right sort of way. It seems to me there are new features that could be developed; it seems to me there should be more of it done; it seems to me these could be done with the co-operation of the local dealers; it seems to me more could be done in the way of demonstrations on serving meals. The rural woman likes to learn about that, and that could be done, it seems to me, with the co-operation of local people who handle that sort of thing. Then I think there is an opportunity of more study along the line of textiles, and that could be done with samples and demonstrations, getting the things from the dealers. The same might be said with reference to house furnishings, and then I believe we could have the story hour. I think the story hour is considered a definite part of the education in the schools. You can reach children, and lots of us grown people are just like children—and it seems to me that with the co-operation of the libraries we could have the story hour where children could be taken care of and really trained women to give these stories. It would be educational work and it would greatly help the mothers who come to the fair with their children. Then I believe we should have more in handicraft, and here we can have the co-operation of the schools, because through the home economics department they teach very lovely work—jewelry work, hand basketry work and needlework, and I think at every fair we should have community sings. It seems to me that any person with ability as a song leader can get the people to sing. I have faith that they could be, and I know that there are other lines that can be made just as interesting. While you men are thinking of increasing production, the women should be given instruction in spending. It is said that women are responsible for the expending of 90 per cent of the money in this country. If that is the case, surely it is worth while to help women to learn how better to spend that money. While you are working for the material progress of the country, what is that worth if we don't use that money to the best advantage? We want better homes, we want the women to have a perfectly sane, wholesome interest in better things, we want them to know what makes a beautiful house and beautiful furnishings. That does not mean expensive furnishings are the best, necessarily, but that the buyer should know what best fits into the surroundings; we believe in the sensible things; we believe in the art of proper selection, and those things that make the home better and the world better. And so I believe while planning these fairs you should drop in and get the co-operation of the women and be ready to put on the finer things, by means of which we are making possible a change we all want in the American homes.

The Chairman: We have with us this morning, Mr. Lowe, of Marshall county. Professor Taff referred to the exhibit put on in Marshall county and he will give us just a word in that respect.

Mr. Lowe: I just want to add a few words to what Professor Taff said. I have the pleasure of living in Marshall county, and I want to tell you gentlemen a few things that they have done in that county in the baby beef line in the last three years. Our fair three years ago had only seven animals exhibited as baby beeves. Two years ago there were seventeen fed and exhibited and this past year we had forty-five. Notice the percentage of increase—seven, seventeen, forty-five, and it is going to hustle our board to take care of the animals that are going to be fed and exhibited this next fall. This contest is not alone confined to boys. I watched the judging of these baby beeves last fall, forty-five strong, out on the race track. There the stock was lined up and one taken out here and placed up there, and another taken out here and sent back somewhere else, and there they moved in different positions. I was glad to see when the final placing was made that the one who stood in the third position was a girl, a girl of sixteen, who had taken that animal—and I have her father's word for it—cared for it and fed it and that girl from State Center, Marshall county, was third. The other exhibits that were put on by the clubs were presented by Professor Taff in his address. I thank you!

The Chairman: This completes our morning program. It is now twelve o'clock. We will adjourn to 1:30 and we hope you will all be back for roll call.

AFTERNOON SESSION.

1:30 p. m.

The Chairman: The first thing on the program this afternoon is the report of the credentials committee.

The secretary will now read the report of the credentials committee and call the roll as shown by the record.

The secretary, Mr. Corey, read the following report of the committee on credentials:

REPORT OF COMMITTEE ON CREDENTIALS.

We, your committee on credentials, report the following list of delegates entitled to vote at the state agricultural convention, December 10, 1919:

COUNTY AND DISTRICT FAIRS.

Adair	F. A. Gatch, Greenfield
Adams	Geo. E. Bliss, Corning
Allamakee	T. J. McDermott, Waukon
Benton	Logan B. Urice, Vinton
Blackhawk	J. L. Bailey, Cedar Falls
Bremer	J. Q. Lauer, Waverly
Buena Vista	Roy H. Wilkinson, Alta
Buchanan	John A. Miller, Jesup
Butler	O. F. Missman, Allison
Calhoun	C. C. Kaskey, Manson
Calhoun	Andrew Stewart, Rockwell City
Carroll	Peter Stephany, Carroll
Cass	Carl E. Hoffman, Atlantic
Cass	C. McBride, Massena

Cedar	C. F. Simmermaker, Tipton
Cerro Gordo	Chas. Barber, Mason City
Clarke	E. T. Wall, Osceola
Clay	M. E. Bacon, Spencer
Clayton, Elkader	C. A. Benson, Elkader
Clayton, Strawberry Point	R. W. Schug, Strawberry Point
Clayton, National	A. J. Kregel, Garnavillo
Clinton	G. H. Christensen, De Witt
Crawford	C. P. Harvey, Denison
Dallas	Barta Speer, Waukee
Davis	F. C. Young, Bloomfield
Delaware	C. W. Williams, Manchester
Des Moines	Frank C. Norton, Burlington
Dickinson	J. I. Overholt, Spirit Lake
Fayette	E. A. McIlree, West Union
Fremont	J. S. Athen, Hamburg
Greene	E. C. Freeman, Jefferson
Grundy	A. G. Briggs, Grundy Center
Guthrie	A. L. Malone, Guthrie Center
Hamilton	Chris Christensen, Webster City
Hardin	W. R. Scholfield, Eldora
Harrison	L. R. Pike, Missouri Valley
Henry	F. B. Montgomery, Mt. Pleasant
Hancock	L. T. Nutty, Britt
Henry	C. W. Larkin, Winfield
Iowa, Williamsburg	J. N. Beilstein, Williamsburg
Jackson	H. Gale Buchner, Maquoketa
Jasper	R. H. Bailey, Newton
Jefferson	E. E. Lucas, Fairfield
Jones, Anamosa	C. H. Ireland, Anamosa
Jones, Monticello	Henry M. Carlsen, Monticello
Keokuk	E. G. Nelson, What Cheer
Kossuth	Ray S. McWharter, Algona
Lee	H. C. Knapp, Donnellson
Lee, West Point	John Walljasper, West Point
Linn, Central City	Ada Golden, Cedar Rapids
Linn, Marion	C. W. Lutz, Marion
Louisa	H. A. McMillan, Columbus Jct.
Lyon	E. L. Partch, Rock Rapids
Mahaska, New Sharon	J. W. Straughan, New Sharon
Mahaska, Oskaloosa	Roy E. Rowland, Oskaloosa
Marion, Knoxville	E. H. Gamble, Knoxville
Marshall	T. P. Low, Green Mountain
Mills	G. H. White, Malvern
Monona	J. M. Hathaway, Turin
Monroe	A. F. Bellman, Albia
Muscatine	W. E. Fogg, Muscatine
O'Brien, Sheldon	C. A. Myer, Sheldon
O'Brien, Sutherland	R. J. Nott, Sutherland
Page, Clarinda	J. C. Beckner, Clarinda

Page, Shenandoah	C. A. Wenstrand, Shenandoah
Pocahontas	E. A. Elliott, Fonda
Pottawattamie	W. W. Wiese, Avoca
Poweshiek, Grinnell	I. S. Bailey, Jr., Grinnell
Poweshiek, Malcom	Wm. McClure, Malcom
Sac	W. F. Weary, Sac City
Shelby	L. H. Pickard, Harlan
Sioux	A. Van de Mide, Orange City
Story	E. H. Graves, Ames
Tama	E. Mericle, Toledo
Taylor	C. N. Nelson, Bedford
Van Buren	N. E. Guernsey, Milton
Wapello	Carl R. Scott, Ottumwa
Warren	C. G. Maxwell, Indianola
Wayne	P. D. Silvernail, Corydon
Webster	H. S. Stanbery, Ft. Dodge
Winnebago	R. E. Hanson, Forest City
Winneshiek	R. E. Bucknell, Decorah
Woodbury	Carl Leytze, Sioux City
Worth	J. M. Slosson, Northwood
Wright	Ed Hood, Clarion
Marshall, Swine Congress	C. E. Arney, Marshalltown

FARMERS' INSTITUTES.

Blackhawk	W. D. Strayer, Waterloo
Buchanan	J. D. Nabholz, Brandon
Poweshiek	R. O. Heatwole, Brooklyn
Worth	E. A. Trimmer, Northwood

COUNTIES IN WHICH NO FAIRS ARE HELD.

Scott	H. B. Moorhead, Davenport

ASSOCIATIONS ENTITLED TO REPRESENTATION.

State Horticultural Society	Earl Ferris, Hampton
Iowa State Dairy Association	J. P. Eves

STATE BOARD OF AGRICULTURE.

Ex-Officio Members.

State Dairy and Food Commissioner	W. B. Barney, Des Moines

Officers.

President	C. E. Cameron, Alta
Vice president	J. P. Mullen, Fonda
Secretary	A. R. Corey, Des Moines
Treasurer	W. W. Morrow, Afton

District Members.

First District	H. O. Weaver, Wapello

Second District	**E. T. Davis, Iowa City**
Third District	**E. M. Reeves, Waverly**
Fourth District	**E. J. Curtin, Decorah**
Fifth District	**Cyrus A. Tow, Norway**
Sixth District	**T. C. Legoe, What Cheer**
Seventh District	**C. F. Curtiss, Ames**
Eighth District	**F. E. Sheldon, Mt. Ayr**
Ninth District	**Chas. Escher, Jr., Botna**
Tenth District	**Sears McHenry, Denison**
Eleventh District	**H. L. Pike, Whiting**

E. J. CURTIN,
G. H. WHITE,
J. C. BECKNER,
Committee on Credentials.

Mr. Curtin: I move you that the report of the committee on credentials be accepted and the committee continued until the adjournment of this meeting so if any members come in we may correct the report.

Motion was seconded and unanimously adopted.

The Chairman: Our next subject on the program is one that I know you are all personally interested in, and the gentleman who is going to present this to you is a man who started in the early history of the work. When he first started in the work it was certainly uphill work, but today he has the proud satisfaction of knowing that he has placed a county agent in every county in the state of Iowa. I take pleasure in presenting to you this afternoon, Mr. John W. Coverdale, secretary of the State Federation of Farm Bureaus.

Gentlemen:

I have sat through the conference of fair managers at the Savery yesterday, and through the meeting here this morning, while you were going over the various problems which confront the various fairs in this state, and I want to say to you that I believe that this is the most successful meeting from the standpoint of an organization that is building up the rural community which I have ever attended, for the simple reason that you people are getting to the fundamental facts of community building.

The subject that I want to present to you this afternoon briefly is that of the farm bureau activities from a county, from a state, and from a national standpoint, because we have that organization today extended into a national organization. Back in 1912, in the month of June, when the first county in this state organized its farm bureau, known at that time as the Crop Improvement Association, down in Benton county, and the next month or so in Scott county, we had little idea of what the work was going to be. We didn't have the vision of what was going to be the growth of that farm bureau, but from the time that first organization was formed the work has continually grown, slowly but steadily, until the war period came on, when the tremendous organization that was needed for the stimulation of food production was brought into being and a farm bureau was placed in every county in this state on February 1, 1918. It was said at that time that the organization of the farm bureaus was a special piece of work for the stimulation of food production, but as an outgrowth of the work that was done during that war period there were some things that, taken from a conference standpoint, from the standpoint of organized effort, led those who were working with the farm bureaus to believe that there was need for other organizations to amalgamate those farm bureaus into a state organization similar to your organization of county fairs. So last year at Marshalltown that organization was made, and it has outlined a definite program of work. The farm bureau movement has developed in various counties of this state. It has developed from the standpoint of a co-operative organization that stands on its own feet, that stands there ready to co-operate with any other existing organization that is striving or working along the same lines. It has no affiliations with any other existing organizations except from a co-operative standpoint. It stands ready to co-operate with the county fair, with the district fair, with the community organization, with any organization that is in for the development of the community. It has stood on that basis, and I want to say to you gentlemen that that has been the success of the farm bureau work. It has grown into an organization that is no longer a one-man proposition. When it started it was said that the county agent movement was an attempt to place a man in every county of the state. In other words, to create another position at the expense of the taxpayer. The farm bureau has grown larger than that. They have found that the county agent is nothing more or less than their paid servant, that he works for that organization, that it develops the work and he carries out the program of development, and what that program is in the county is what the members of that organization make. As your worthy president has stated, in the beginning of the work we sometimes thought, and I know a great many of the county officers of the farm bureaus thought, "What's the use, the people aren't appreciating this work;" but as it went on, and as time developed it, we found that it was commencing to leaven the loaf, that people were beginning to get the big vision, that if they were to get anything out of this work it was necessary for them to get into it and help direct it along the lines of development of that county, the particular community in which they resided.

What were the things that led up to the state federation? I can mention a few of them. It is like going back and telling an old story time and time again, but when we had that seed-corn situation two years ago the organization proved its worth. Men who had been in the state for 30 years remembered the crisis that they went through at one period before when we had a seed-corn famine in this state and they sent in seed corn from other states and outside counties that didn't mature, so they knew the crisis they were facing, but by careful co-operation with other existing organizations, and every one in the state I think co-operated along that line, all pulling together, they were able to furnish seed corn enough out of our state to plant our corn crop in 1917. There was demonstrated to us that that was a piece of work that guaranteed the establishment firmly of the farm bureau movement in this state. Then we went in further during the war period and found that there was a scarcity of labor. Over 100,000 of our boys were called into the army and navy and munition works and out of the fields of agriculture. We saw as we got into July that we were to have a bountiful corn crop, or at least the indications were along that line, and all at once those hot winds from Kansas came through southwestern Iowa and commenced to burn up our corn crop. What was the result? There again the farm bureaus, through its exchange, furnished lists throughout the various counties of the state of the products that they wanted to buy, and it was not long until large groups of men were going into southwestern Iowa and picking up live stock by the trainload. It was necessary for southwestern Iowa to change that situation, they were in serious circumstances, they were in danger of losing their stocks, because they were without feed, but the tide turned, and through farmer exchanges of northeastern Iowa they began to move hay and corn and straw into southwestern Iowa, in some counties over 400 carloads of corn were moved, in order to save this live stock. And I want to say to you that the farm bureau as a clearing house has rendered itself serviceable to the people of the state of Iowa to such an extent that it is now in every county in the state of Iowa and they couldn't be without it.

About state fair time in 1918 when those 100,000 of our boys were taken out of the ranks of production, we had this corn crop coming on, and we heard inklings of the high prices to be charged for corn husking, and at a convention of the farm bureaus assembled at the state fair ground in 1918 they discussed this proposition, and they said that a fair and just price to all parties concerned, both the laboring man and the owner of the crop, would range somewhere around seven or eight cents per bushel, and this went out broadcast over the state and what did it do? It stabilized this situation, and the result was that last year the corn crop went into the bins at seven and eight cents and the same thing was done again this year.

Now, gentlemen, those were some of the things that led up to the State Federation of Farm Bureaus at Marshalltown last December. After the state federation was made, they said, "Here, what are you fellows going to do? Are you going into politics? Are you going into the mercantile business? Are you going to upset the conditions of our state?" And I want to say that after that organization was formed they outlined a definite program of work along four lines—the first one along the line of organization, the second one along the line of marketing and transportation, the third one along the line of education, and the fourth one along the line of legislation. Now, from the development of that program I am sure you would be somewhat interested in the lines of work that have been attempted from the state standpoint. In the first place, from the standpoint of organization: While the organization committee with their program haven't been active until recently, they adopted the following policy: That the farm bureau organization was an organization not to take the place of any existing agricultural organization, but to work with them, to co-operate with them in every way possible. That has been their motto throughout the season, and they have been co-operating with every other existing organization, and I want to say to you that the word "co-operation" as we understand it has a different meaning than most people give to it. In other words, I believe an explanation of the word co-operation means putting yourself in an attitude so that the other fellow can work with you. That is our definition of co-operation.

Now, from the standpoint of organization: We had during the past year about 20,000 members of the farm bureau in Iowa. In other words, an average of 200 or a little better to a county. That is not strong enough organization to reach the definite lines of work that should be reached within the county. At the state fair this past year we established what is known as Farm Bureau Day, a day which was set aside through the courtesy of the state board of agriculture. The farm bureau had a camp established at the fair, where the people connected with the farm bureau work pitched their tents together and got acquainted and learned what the other fellows were doing in the other parts of the state. In the large assembly tent on Monday we held a program, at which meeting some 900 people were present interested in the farm bureau work. At that meeting it was decided to increase the interest in the farm bureau work in the state of Iowa, realizing the benefits that had accrued therefrom, and it was decided and agreed that a membership campaign should be put on in this state this fall. On the 22d day of September this membership campaign opened up in Hardin county with 16 men co-operating with the local farm bureau. At the end of that first week 1,178 members had been signed up as members of the farm bureau, and they had agreed, in addition to becoming a member of the farm bureau, to subscribe something like $2,700 to a special fund for the use of the federation as an emergency fund. This campaign grew into other counties. It went into Butler county the following week, and then into Floyd and Fayette, and then into Story county and Buchanan, and there are many men in this audience who were in that campaign. And so it has gone forward steadily until this week we have 287 men who are traveling up and down the roads of Iowa calling on every farm home in 18 counties and giving them an opportunity to become members of the farm bureau and subscribe to the farm bureau federation special fund. Up to the present time the average memberships in the 79 counties organized up to this week has been 1,200 or a little better, with an average subscription to the federation of $3,500 per county. On the 20th day of December we will have finished every county in this state. Next week 21 counties will be organized—the final week, when we go over the top. In this drive it is our aim to reach every farm home in this state, and then, so far as we are able to ascertain, and the records coming in indicate that they are calling on practically every home—80 per cent of those people are home. In other words, we are missing 20 per cent that have not been seen in the first drive, and 90 per cent of those 80 per cent of the farmers seen are becoming members of the farm bureau. In other words, on the 20th day of December, at the present rate our organization drive is working, there will be a membership of 120,000 farm bureau members in the state of Iowa.

Now, then, what are we going to do with the other 20 per cent of those men who have not been reached? On the 5th day of January a second organization drive will be made. Instead of an individual farm house-to-house canvass, this next one will be in the form, or on the plan, of a township meeting. We are taking about 30 men who have been out on the first drive and bringing them together and giving them the vision of those men who can make good talks, and bringing them together for two or three days to exchange their ideas, and they are going back to these various counties in the state for a second drive and are going to invite in every member of the farm bureau that signed up, invite him to bring his friends who were missed in the first drive and hold a township meeting in every township in the state of Iowa. The second drive will end on March 1st. In that drive we expect to bring in another 40,000 or 50,000 members. And at the same time that that drive is completed, every man who has attended those meetings will know how to make use of the farm bureau, what it stands for, what the state organization stands for, and what the national organization stands for. In other words, we will have 150,000 or 160,000 men in this state who are thinking in the same direction along the line of farm bureau work. So much for organization.

Taking up some of our other points: The work of marketing and transportation: That is what interests everyone, it interests every producer because he said time and time again that the farm bureau work has been along the line of stimulating food production and we haven't been doing anything along the line of marketing or transportation, and I want to assure you, friends, that all during these seven years there has been constantly going on a system of marketing and building up that organization, whether we have been conscious of it or not, it has been constantly developing, slowly developing, until at the present time they are ready to come out with some definite programs which have been worth a great deal to every county and every community in which they existed. The problem today that is confronting the farmer is not so much the buying end as it is the selling, and when it comes to selling end he lacks information at the present time on the cost of production. Now, how is that to be gained? We find that true in every community. When you say to a man, "How much does it cost you to produce this article?" he is not able to tell you. Three years ago I attended a convention of swine producers of the Mississippi valley states. At that time there was under discussion the cost of production, and a man got up and gave testimony that it took all the way from 8 to 18 bushels of corn to produce 100 pounds of pork, and they were all guessing at it. The only accurate way is that presented by Prof. Evaard, of the Iowa Experiment Station. They were not willing to take the testimony of one man, but they wanted the actual tests out in the field, but they weren't able to give it to them, so they finally called a committee of 12 or 15 men together and tried to come to some agreement, and I'll leave it to you if you were sitting on a jury and had the same kind of evidence presented to you, you would not have done any different than they did at that time. In other words, after getting back from that meeting, I talked it over with our executive board and we decided it was necessary to carry on some very careful cost account records, and through the college a special series of meetings were held with the farm bureaus of the state and six or eight men in each county were started out on individual cost accounting studies. Those records have been going along now, some of them, three years, two years, and a good many more started last year, and I want to say to you that a very short time ago I received a letter from the federal trade commission asking for a list of the officers of our organization, and I believe, gentlemen, I can read between the lines, for when that letter came to me it indicated immediately that inasmuch as the federal trade commission has been investigating during the past two or three years and longer the high cost of living, they had been investigating the live-stock packers, they had been investigating the wholesale grocers, they had been investigating everybody, I believe that within a very short time the farmers of this and every other state are going to be called upon to give expert testimony as to the cost of producing their individual farm products. Do you know that the agitation carried on during the past year, or three or four months especially, to push down the high cost of living, and that "buck" has been passed back and forth until it has landed on the producer, and he is going to have to tell the truth some of these days as to what it costs to produce, or else he is going to have to bear the burden. What is going to be the result? We have got probably 300 men in the state of Iowa who have got some figures as to the cost of production. At that time those men will be called, their books will be brought in, and they will have some records. Perhaps we can get a little ways with it, but that is not complete; we have got to go further than that, we have got to study the cost of production on the individual farm before we can get anywhere on this farm bureau problem. The farm bureau has on the press 40,000 of these account records that will be distributed by the extension division. Over 29,000 of those books are spoken for and will be used by the farmers in this state in getting down to a systematic study of the cost of production on a farm, and within a short time, within a period of three years, we will know more about our business than we know at the present time, and when that thing is known, then some substantial system can be worked out that will help our marketing problems and credit, especially with respect to our national organization that has been brought into existence at Chicago recently.

Now, then, as to the marketing work that has been done in the state. You men connected with fair work know of the success of the county live-stock breeders' association. Why were they organized? Principally for the purpose of bringing together into a county organization all the live-stock breeders for the development of their particular interests. Incidentally that organization serves a two-fold purpose: It is a marketing organization because the first thing they do is get out a co-operative catalog in which they advertise together and it is distributed broadcast over the county and it is distributed throughout the state and the country, and presently you have buyers coming in and picking up that stock by the carload, and pretty soon they will be picking it up by the trainload. It is to the advantage of the grain men in the marketing of their product that we have the co-operative elevator movement in the state. They have formed a national organization and are given recognition on the grain exchange. We have organized up to the present time about 400 co-operative live-stock shipping associations for the marketing of live stock. They have recently been federated into a state organization, and recently at the international they became a national organization, and those organizations are going to do much to iron out the troubles of the marketing end of our business. The farm bureau has been fostering those things and we have been giving them support, both moral and financial. Last year the organization of co-operative wool growers of the state came into existence, and that is another example of a marketing organization. It serves a two-fold purpose: It is designed and created for the man who grows good wool for the purpose of paying him value for what he has produced, and the fellow who is producing poorer quality the same result with regard to his products. That wool-marketing association, while it is new, marketed this last year nearly 1,000,000 pounds of wool. Now, directly, that wasn't a part of the federation program, it didn't reckon in it originally, but they lent their financial and moral support to this organization and developed it. In other words, gentlemen, in order to get anywhere on this marketing problem, you have got to band those men together of like interests—the fruit men, the grain men, the pure-bred stockmen, etc., and develop your program along that line.

Now, there are some other things in connection with marketing in which we are interested as individual men, and we have been wondering just what the federation proposed to do along those lines. Not along ago the secretary of the Implement Dealers' Association came into my office and wanted to know in what way the implement dealers could render more service to the farmers in this state, and he thought it would be along the line of larger stocks of repairs, perhaps—he thought that would be of greater service to the farmers. I said, "Mr. Secretary, I have a different vision of what service the retail implement dealer could be to the farmers of this state. I don't believe it would be fair to you retail dealers to require you to carry a larger stock of repairs, but there are some things they can do that will be of service. In other words, the worst feature we have today in connection with the repair of our farm implements is not the size of stocks, but the lack of standardization of bolts, threads, keys, etc. All those things can be standardized from the standpoint of farm equipment, and that would help the farmer infinitely." He said to me, "Will you come down and present that at our meeting at Des Moines next week?" I said, "No, I won't, but I will have some officer of our organization come down, provided you implement dealers as an organization get back of our program and stand back of us in our demands for standardization of farm equipment," and he says, "We'll do it," and I said, "Furthermore, we want some of the manufacturers' associations and officers of those associations there to put it up to them strong enough to get results, and we will stand back of you on that program," so perhaps within a short time we can bring something about which will do a great deal to standardize the repair system or the parts of common farm machinery so that a man will not be laid up for lack of some bolt or something of that sort when he tries to repair his machine. I said, "Furthermore, the proposition with regard to twine needs correction." He brought up the twine situation, and I said, "I know the twine business is just a small part of the implement dealer's business, but here in Des Moines they set an example of efficient marketing and handling of the twine situation. They established here last year a special twine sales week, and they said to every implement dealer in the county, 'During twine sales week you will sell your twine for cash at a discount,' and they advertised it co-operatively over the county, and every farmer had an opportunity during the early week of April to come to his dealer and get his twine at a discount for cash, and the dealer got his cash and the farmer a discount. And so repair weeks can be established, at which time special effort can be made to get special work done." I said, "Furthermore, the average mercantile business in town today is no more or less than a service station. The success of that service station depends upon the service it can render to the people of the community, and just so long as a business interest renders service at a reasonable cost and with which the people are satisfied, just so long should that business be left intact. But as soon as it does not render efficient service, then some steps must be taken to set up some plant that will render satisfactory service to that people and that community." And I believe that our organization has this aim, to get the product to the consumer as cheaply as possible; but that does not mean setting up more stores in the community, more service stations, but it does mean making those service stations that exist more successful. A short time ago we had up in our little town the establishment of an extra butcher shop. I had considerable argument with the people of our community about it, they contending that it would be a fine thing for our town, while I said, "Gentlemen, it will mean higher meats for your town, because it will mean more meat cutters and more overhead expense," and that is just an example of our system of marketing.

Now, from the standpoint of education: Your county fair is working for the development of educational features relative to community building. You know that when we came to examine the draft records of the state of Iowa we found out that out of all those young men exempt from military service, there were over 30,000 of those men who couldn't pass a literacy test, and yet we boast of our excellent schools and high schools and universities. I believe it is a problem that concerns our homes in this state of Iowa. I am particularly interested in the matter of community development. I have a little picture that I would like to paint for you as to what I would like to see brought about in this state. When we got to studying our draft reports we got some statistics that we hadn't thought much about before. How many men do you suppose there are in your county every year that take up farming for themselves? Our records showed about 80 to 120 of new farmers every year. Now, take, for instance, the medical profession—a fellow doesn't go out and practice medicine until he has had some training along that line. He must have training, and yet among those 80 or 120 farmers every year, we have graduates of all kinds of schools, and some that haven't even finished the common grade school or the consolidated school or the high school, and some are university graduates, etc. If those men could be brought together for three months during the winter time, during December, January and February, and the young women as well, to rub shoulders with one another and get a brief course in agriculture, don't you suppose it would make them better farmers? In other words, in this business course in agriculture I would have a sort of review of some work that they had taken up during the college and school career, but I know that it should be of such nature that it would be applicable to everyday life of the farm—common, plain agriculture, arithmetic, some business letter writing, some farm studies, etc., but the main thing is in getting those 80 or 120 young men to thinking in the same direction and see their business from the co-operative standpoint. Supposing you got only 40 or 50 of those fellows together, in 10 years' time, if you only had 40 per winter, you would have 400 men who had studied their business together and were acquainted with one another, and who understood their duties in that community, and what would it mean for citizenship! That's the problem! If that thing could be put over we would have no fear of the situation to which some speakers referred last night. We are standing back of a program of that kind. We went to the legislature last winter and asked them for appropriations so that that could be brought about to a certain extent. We are asking the co-operation of every educational institution in the state for the development of that particular line of work, and we hope to push it through. Legislation, my friends, is not made in the legislature; legislation is not politics; legislation from the agricultural standpoint is that legislation which stands for community development, which stands for the protection and interest of those particular interests we are interested in, and looking at it from the standpoint of the live-and-let-live principle. We are not standing for class legislation or class distinction, but we are standing for the development of our particular interests on a common basis with all other lines of work. Our president, Mr. Howard, is in Washington today; he is there on a program, friends, that is the greatest thing that ever came before the people of the corn belt, and that is that he is down there today fighting for some measure to control or eradicate the corn borer, which is an insect that is coming into the eastern states and is moving into New York state, it is as far west as Ohio, following along the New York Central lines. That corn borer, if you ever had a chance to investigate, takes everything, and if it got into this $416,000,000 corn crop and was spread broadcast over the state of Iowa, what would happen to your $300, $400 or $500 land? Now, gentlemen, that is a problem that is going to take organized effort to solve. It is worse than the ravages of the foot-and-mouth disease ever could be, and it is our business to fight it by organized effort. Those are a few problems with which we are going to contend.

I wish I had time to read you the platform of the American Farm Bureau which was adopted at Chicago. It shows our attitude with regard to the various existing lines of work that the farm bureau stands for. How much time have I, Mr. Chairman?

The Chairman: Five minutes.

Mr. Coverdale: I will read it in five minutes. This is the platform that was adopted by thirty-three states of the Union that met at that agricultural convention for the purpose of organizing the American Farm Bureau Federation.

ORGANIZATION.

1. Believing that the strength and origin of the American Federation of Farm Bureaus have been achieved through co-operation with the state and federal departments of agriculture, upon a sound educational program we declare it to be our purpose to continue such co-operation in the future, and that neither business enterprise nor legislative activity should diminish such co-operative, educational activities.

2. We declare our independence of affiliation with any commercial, labor or industrial organization, but maintain a co-operative attitude toward all movements promoting the welfare of American institutions.

3. We urge the strengthening of county organizations financially and otherwise, in order that capable men may be employed to manage the work of the county organizations.

ECONOMIC.

1. With few exceptions in the past 40 years the farmers' sole profit has come from unrestored fertility taken from the soil, and from long hours of work and unpaid labor of women and children. We insist that these are legitimate factors in the cost of food production, and must be so recognized by commercial interests and by the general public.

2. We assert that the farmer is entitled to a just profit on the cost of production on all products with these items properly accounted for, with due consideration of the hazardous risks he encounters, and with a wage allowance for his own labor and ability commensurate to that received in other occupations.

3. We recognize that land ownership is stewardship; that ownership does not give the right to soil depletion, and we deplore the system of tenantry that encourages a rapid reduction of soil fertility.

4. We unqualifiedly assert our loyalty to the principles of the freedom of the people under our American institutions; and while recognizing the right of any and every class of our people to associate themselves for material benefit, we just as strongly assert the right of every American citizen to the free and unhampered privilege of disposing of his labor or products thereof as he may individually desire.

5. We desire to point out that a large factor in the high cost of living is the curtailment of production through shorter hours, lessened efficiency of labor and strikes.

6. Recognizing the economic law that impels the consolidation of business we proclaim that relief from the extortion of monopoly in manufacture and commerce is to be found in co-operation, in enforced publicity of business records, and a just graduated income tax rather than through interference with the economic law upon which great industries are founded.

LEGISLATION.

1. When state or federal government grants corporate rights to any organization it is incumbent on that government to protect the public through such regulative legislation as will best prevent favoritism, stimulate initiative and guarantee adequate public service.

2. We are opposed to government ownership of public utilities. We demand the early return of the railroads to private control, under such conditions and regulations as will render adequate service at just and equitable rates. We particularly demand immediate attention to restoring the efficiency of live-stock and other perishable transportation, both in car equipment and train schedules.

3. We recommend such regulation of all purveyors of foodstuffs, including packers, wholesale grocers, commission men and all similar industries, in such manner as will be just and fair to producers and consumers as well as to the industries.

4. We demand strict economy of public expenditures in all departments of government, the cutting out of such customs in transaction of public affairs as add expense and delay in rendering efficient service, and the discontinuance of all departments or employes which are not rendering efficient service.

5. We urge that as rapidly as possible all corporations doing interstate business to be under federal charter, and all other corporations to be incorporated under the laws of the state in which their principal business is located.

6. We approve the federal land banks and request that the maximum individual loan be changed from $10,000 to $25,000.

7. We believe Armistice Day should be made a national and international holiday, and to that end we request the proper authorities, both national and international, to so act; and we suggest, since Thanksgiving Day is not an anniversary of the event commemorated, and the date generally observed is so near Armistice Day, that it would be well for national and state governments to make the two days legally coincident.

EDUCATIONAL.

1. Where service is needed and actually rendered we favor appropriations adequate to meet that service. We commend the extension work of the department of agriculture, through the land grant colleges of the several states.

COMMENDATORY.

1. Recognizing our great obligation to the returned soldiers and sailors, we recommend the appointment of a committee of three of our board of directors to act with the American Legion in devising means of getting soldiers reinstated into civil life.

We extend to our soldiers of lands, seas and air, and to the men and women fresh from the battlefields and hospitals of Europe, our admiration and our love. They are worthy of boundless gratitude and praise, and no gift of the people is too good for them.

We commend them for organizing the American Legion. We see in it what we have seen in the Grand Army of the Republic and the United Confederate Veterans, a soldier citizenry for law and order, a guaranty that civil and religious liberty shall be maintained in the land.

2. We commend especially the bureau of farm management, department of agriculture, and we believe the work of the bureau of markets and the bureau of crop estimates should be vitalized and adequately supported to meet the needs of agriculture.

3. We appreciate the work of the press, both agricultural and secular, in its promotion of high ideals and constructive thought.

4. We express our appreciation of the act of congress in repealing the so-called daylight saving law.

5. We are unqualifiedly in sympathy with the government's determination to suppress radicalism, and we lend our influence and support to all efforts to rid this country of bolshevism and all other anarchistic tendencies.

Especially do we deplore the outrage committed at Centralia, in the state of Washington, and we trust that the government has already taken firm steps to punish the perpetrators of this crime and to prevent the recurrence of any such outrage against the flag and the citizens of our country.

NEGATION.

1. We deny statements of some congressmen that farmers demand free seed distribution and we condemn the practice.

That is the platform of the American Farm Bureau; it is the platform of the state farm bureaus, and it is the platform of the county farm bureaus, and it is the platform that 120,000 farmers on December 20th will be affiliated with, and that other similar organizations of the states are affiliating themselves with.

I thank you!

The Chairman: We will now hear the report of the committee on resolutions.

Mr. H. S. Stanbery, chairman of the committee on resolutions, read the following report:

REPORT OF COMMITTEE ON RESOLUTIONS.

To the members of the State Agricultural Convention:

We, your committee, beg leave to submit the following report:

First, we desire to congratulate the management, the officers and directors of the Iowa State Fair on the great success they have made of our state fair, last year's receipts and attendance being by far the largest in the history of our organization. These results are accomplished largely by the untiring efforts of our efficient directors.

Therefore, Be It Resolved, That we extend to the officers and directors of the Iowa State Fair our sincere appreciation and thanks for the loyal and efficient service rendered during the past year and tender to them our hearty co-operation in the management of future fairs.

We, your resolutions committee, desire to take this occasion to recommend to the officers and directors of the Iowa State Fair that a permanent headquarters be established in the Administration Building for the secretaries and managers of the county and district fairs in Iowa, to be presided over and in charge of the officers of the Iowa Association of Fairs.

During the past year the beloved wife of Mr. L. H. Pickard, a former director of the state board of agriculture, passed to the great beyond. Mr. and Mrs. Pickard had just rounded out fifty years of wedded life when death separated this happy union. Mrs. Pickard had the honor of casting the first woman vote ever cast at the state agricultural convention.

Therefore, Be It Resolved, That we extend to Mr. Pickard our heartfelt sympathy and condolence in his bereavement.

Respectfully submitted,

H. S. STANBERY,
I. S. BAILEY,
C. E. HOFFMAN,
Committee on Resolutions.

Mr. Stanbery moved the adoption of the resolutions. Motion was seconded and unanimously adopted.

The Chairman: The next order before us is the election of officers for the ensuing year.

The vice president was called to the chair.

The Vice President: Gentlemen the first will be the election of a president. What is your pleasure?

Mr. W. W. Morrow: I place in nomination Mr. C. E. Cameron, of Alta, to succeed himself as president.

Mr. M. E. Bacon, of Clay county, seconded the nomination and moved that nominations close; that the rules be suspended and the secretary instructed to cast the vote of all delegates present for Mr. Cameron for president. Motion was seconded and carried and the secretary announced that he so cast the one hundred and nine votes of the convention. Mr. Cameron was declared duly elected president of the state board of agriculture for the ensuing year.

Mr. Cameron again took the chair as chairman and made the following remarks:

Gentlemen: I hardly know what to say to you; how to thank you for this continued honor. The best compliment that I can pay you is to repeat a remark that was made last night. It wasn't for publication but I will tell you what the gentleman said. As we sat at the banquet table this gentleman said, "I have attended every meeting of state fair secretaries in existence, and I want to say to you that you have the finest-looking bunch of county fair secretaries that it has ever been my pleasure to see," so why should I not be proud of the fact that I am again honored by a group of men that rank not only as Iowa does so many times, but you have the distinction as representing the county fairs and as delegates to this convention as ranking first with Iowa in all that is great. I thank you, gentlemen!

The next order will be the election of vice president. Nominations are now in order.

Mr. H. S. Stanbery, of Webster county, nominated Mr. J. P. Mullen, of Fonda, to succeed himself as vice president. The nomination was seconded by Mr. Carl Leytze, of Woodbury county. There being no further nominations, Mr. Stanbery moved that the rules be suspended and that the secretary be instructed to cast the vote of the convention for Mr. J. P. Mullen to succeed himself as vice president. The motion was seconded and carried and the secretary so cast the one hundred and nine votes of the convention for Mr. Mullen. The president declared Mr. Mullen duly elected vice president to succeed himself for the ensuing year.

The Vice President: I sincerely thank you. I am extremely grateful to you for your continued confidence, and I assure you that the best service of which I am capable in the future in the conduct of the state fair and agricultural exhibits will be at your command.

The Chairman: Nominations for members of the state board of agriculture from the odd-numbered districts are now in order. Nominations are in order for member for the first district. Mr. H. O. Weaver, of Wapello, is the present incumbent.

Mr. E. J. Curtin, of Winneshiek county, nominated Mr. H. O. Weaver, of Louisa county, to succeed himself. The nomination was seconded by Mr. J. C. Beckner, of Page county. There being no further nominations a motion was made by Mr. E. J. Curtin, seconded by Mr. John Walljasper, of Lee county, that the rules be suspended and the secretary instructed to cast the vote of the entire body for Mr. H. O. Weaver. The motion was unanimously adopted and the secretary cast the one hundred and nine votes of the convention for Mr. Weaver. The president declared Mr. H. O. Weaver duly elected member from the first district for the ensuing two years.

The Chairman: The next office to be filled is that of director from the third district. What is your pleasure?

Mr. J. Q. Lauer, of Bremer county, placed in nomination Mr. E. M. Reeves, of Bremer county, to succeed himself as director from the third district. Mr. R. S. McWharter, of Kossuth county, seconded the nomination. There being no further nominations Mr. McWhartor moved that the rules be suspended and the secretary instructed to cast the full vote of the convention for Mr. Reeves. The motion was seconded and unanimously adopted. The secretary thereupon cast the vote of the convention as directed for Mr. E. M. Reeves to succeed himself as director from the third district. Mr. Reeves was declared the duly-elected member of the state board of agriculture from the third district for the ensuing two years.

The Chairman: Nominations are now in order for director from the fifth district.

Mr. C. F. Simmermaker, of Cedar county, nominated Mr. Cyrus A. Tow, of Linn county, to succeed himself as director from the fifth district. The nomination was seconded by Mr. E. Mericle, of Tama county. There being no further nominations Mr. Simmermaker moved that the rules be suspended and the secretary instructed to cast the vote of the entire convention for Mr. Tow. The motion was seconded and carried. The secretary so cast the one hundred and nine votes of the convention for Mr. Tow. The president declared Mr. Tow the duly-elected member of the state board of agriculture from the fifth district for the ensuing two years.

The Chairman: The next office to be filled is that of director from the seventh district.

Mr. E. H. Graves, of Story county, nominated Mr. C. F. Curtiss to succeed himself as director from the seventh district. Mr. J. I. Overholt, of Dickinson county, seconded the nomination. There being no further nominations Mr. Graves moved that nominations close, the rules be suspended and the secretary instructed to cast the entire vote of the delegates present for Mr. Curtiss as director from the seventh district. The motion was seconded and unanimously adopted. The secretary so cast the one hundred and nine votes of the convention for Mr. Curtiss and the president declared Mr. Curtiss duly elected member of the state board of agriculture to represent the seventh district for the ensuing two years.

The Chairman: Nominations are now in order for director from the ninth district.

Mr. L. H. Pickard, Shelby county: I wish to put in nomination as member of the board from the ninth district Mr. Charles Escher, the present incumbent, and I don't think Mr. Escher needs any particular introduction to this meeting. Mr. Escher is one of the largest breeders of Angus cattle in the United States. The last sale that he held aggregated $337,000 and one bull brought $36,000. This sale was the largest sale of beef cattle that was ever held—that is, the sales aggregated the largest amount of any sale ever held in the United States. I place in nomination Mr. Charles Escher, of Shelby county.

The Chairman: Are there any further nominations?

Mr. Pickard: If there are no further nominations I move you that the rules be suspended and the secretary authorized to cast the vote of this body for Mr. Escher. The motion was seconded by Mr. Carl E. Hoffman, of Cass county, and unanimously adopted. The secretary thereupon cast the vote of the entire convention for Mr. Escher to succeed himself as director from the ninth district. The president declared Mr. Escher duly elected member of the state board of agriculture to represent the ninth district for the ensuing two years.

The Chairman: Nominations are now in order for director from the eleventh district. Mr. Pike is the present incumbent.

Mr. J. M. Hathaway, of Monona county, nominated Mr. H. L. Pike, of Monona county, to succeed himself as director from the eleventh district. The nomination was seconded by Mr. M. E. Bacon, of Clay county. There being no further nominations, Mr. Hathaway moved that the rules be suspended and the secretary directed to cast the vote of the convention for Mr. Pike. The secretary so cast the vote of the convention and Mr. Pike was declared the duly elected member of the state board of agriculture from the eleventh district for the ensuing two years.

The Chairman: There are a good many new faces here at this meeting. You voted for all these men and I am satisfied that they feel grateful to you. However, the gentlemen who have not been here before want to know for whom they voted so I'll ask the newly-elected directors to rise to their feet.

Mr. Chairman of the credentials committee, have you any further corrections to make in your report?

Mr. Curtin: No sir, I am afraid that the list is complete.

The Chairman: I would like to have you read the list of associations that have not reported so that we will be sure there is no delegate present.

Mr. Curtin: The following are the fairs that forfeit the hundred dollars: Audubon county, Boone county fair at Ogden, Harrison county, Humboldt county, Derby district fair, Lyon county, Pella district fair and Mitchell county.

The Chairman: Gentlemen, what will you do with the final report of the committee on credentials?

Mr. Roy Wilkinson, of Buena Vista county, moved that the report of the committee on credentials be accepted. The motion was seconded by Mr. W. F. Weary, of Sac county, and unanimously adopted.

The Chairman: If there is nothing further, a motion to adjourn will be in order.

Mr. I. S. Bailey, of Poweshiek county, moved that the convention adjourn. The motion was seconded and unanimously adopted.

PART III

Twelfth Annual Convention of the Iowa Fair Managers' Association

HELD AT THE HOTEL SAVERY, DES MOINES, IOWA, DECEMBER 9-10, A. D. 1919.

The Chairman (H. S. Stanberry): Gentlemen, we will come to order. The first procedure is the appointment of a Credentials Committee. What method will you adopt for that?

Motion made, seconded and unanimously adopted that the chair appoint a committee on credentials.

The Chairman: I will appoint on that committee, as chairman Mr. Carl E. Hoffman, Mr. W. R. Scholfield and Mr. J. L. Bailey.

The next matter is the Resolutions Committee. What is your pleasure for that?

Motion made by Mr. Scholfield, seconded by Mr. Harvey, and unanimously adopted that the chair appoint such committee.

The Chairman: On the Resolutions Committee I will appoint Roy Wilkinson as chairman, Mr. J. C. Beckner and E. S. Estell. I will say that we have thought best to have the resolutions committee report the first thing tonight at our banquet, desiring to have it at that time for the reason that there are many things that may happen during the day that you may want to embody in your resolutions, so that if the resolutions committee will get together during the late afternoon and draw up its report and present it at the banquet, it will be very agreeable.

The credentials committee I would like to have meet in the parlor at noon, or immediately on the adjournment of this meeting.

I think the next thing is the report of our treasurer.

The Treasurer (F. A. Gatch).

Treasurer's report from January 14 to December 9, 1919:

Cash balance, January 14, 1919	$ 167.53	
Receipts, including dues	900.49	
Total receipts		$1,068.02
Total disbursements		294.59
Cash balance, December 9, 1919		$ 773.43

The Chairman: You have heard the report of the treasurer. What shall we do with it?

Motion by Mr. Williams, seconded by Mr. Beckner, and unanimously adopted that the report of the treasurer be approved and accepted as read.

The Chairman: We will next have the report of the secretary, Mr. J. Q. Lauer.

The Secretary: I haven't a great deal of report to make, and inasmuch as we had that pamphlet issued last year, you are all familiar with it. To all those who are not familiar with our last year's meeting, I will say that we have some of them left and you are welcome to a copy. There is also quite a lot of new matter in that pamphlet and it makes mighty good reading. I know that I have enough of the reports to supply the demand of those who didn't receive a copy.

Both committees, the entertainment and the officials of the board of directors, have been having an awful time here in Des Moines—and we aren't throwing any flowers at the fellows of the committees, but when we first came down here the matter of a banquet was immediately eliminated from the program. It was said there was no chance. This hotel has called off over fifty banquets on account of the fuel situation, but through the courtesy of the city fuel department we were permitted to carry out our program as far as our banquet is concerned, and our program as now arranged is complete, and there is not a thing on this program that will not be carried out at this time. Our entertainment feature, in connection with our banquet this evening, is something that should not be missed. Our program will be carried out entirely. So that if you hear any rumors that the banquet will not be permitted, just remember that the banquet will be held here tonight on the lower floor.

On the program will be Mr. Ray Files of Fort Dodge, who will give us something that will be worth remembering. He has promised to be here, and I told him that if there was a change in our program I would wire him.

This report will be very short, and it is just a synopsis.

In the absence of both the president and vice president, the meeting was called to order by the secretary and he in turn asked for nominations for temporary chairman. Mr. Mullen of Fonda, placed the name of H. S. Stanberry before the meeting, the motion was seconded by Mr. Leytze of Woodbury county, and when put to a vote carried.

Mr. Stanberry took the chair and asked for the reading of the minutes of the previous year's minutes by the secretary, a synopsis of which was given and on motion approved.

The treasurer's report was read by Mr. Gatch and also approved.

At this time the chair appointed the following committees:

Credentials—H. C. Leach, E. T. Austin, J. P. Mullen.

Resolutions—G. E. Bliss, L. R. Pike, R. E. Rowland.

Payment of dues, distribution of badges, and round-table talks took up the balance of the forenoon.

The round-table talks included the following subjects: State aid, county aid, horsemen's protective association, the Flaws fourteen points, pamphlet of minutes of meeting, and legislation.

The afternoon meeting was called promptly at 1:30 o'clock, in the Rose Room of the Chamberlain hotel. The chair again opened the meeting to round-table talks and the subject of Speed received a share of the time allotted. The discussions being taken part in by Ed Allen, C. E. Cameron, M. E. Bacon, and others.

The first paper on the program, entitled Our First Fair, was assigned to M. E. Bacon of Spencer, Iowa, and this was a discussion worth while, and can be time well spent in re-reading.

A discussion on the advisability of county and district fairs having uniform systems of blanks and bookkeeping was discussed by A. R. Corey, secretary of the Iowa State Fair, and also by M. E. Billings, of the firm of Billings, Prouty & Tompkins, certified public accountants of Waterloo and Des Moines, and was thoroughly brought to the attention of all, and advocating the advisability of following such a system.

The topic, should fairs be compelled to have a representative at the annual agricultural meeting in order to receive state aid, was discussed at this period and the decision was positively in favor of some such legislation.

The Resolutions Committee reported at this time; also the Credentials Committee.

John Cownie was then called upon and gave an interesting talk along the lines of agriculture.

The election of officers was next in order with the following results:

President—H. S. Stanberry, Fort Dodge.

Vice President—Andrew Stewart, Rockwell City.

Treasurer—F. A. Gatch, Greenfield.

Secretary—J. Q. Lauer, Waverly.

District Managers—W. H. Shipman, R. E. Rowland, G. H. White, M. E. Bacon, W. F. Weary, S. D. Quarton and J. L. Bailey.

Entertainment Committee—M. E. Bacon, Carl E. Hoffman, Roy Wilkinson, F. A. Gatch, J. Q. Lauer.

At 6:30 p. m., all were invited to the banquet, which was a feature of the meeting. The flu kept away a great number, as indicated by the letters received, but those that attended seemed to feel as though they had been well repaid.

H. S. Stanberry was toastmaster.

Mayor Tom Fairweather gave the address of welcome.

C. E. Cameron was asked to respond and he surely did credit to this part of the program.

Governor W. L. Harding was asked to make a few remarks which he did in his amiable way.

Hon. J. B. Weaver of Des Moines, gave the talk of the evening and all seemed to be under the influence of the speaker. His address was a feature, and for those that did not hear it I could think of no better suggestion than that you get the minutes of this meeting and read the address.

Other guests that were called upon were Mr. Faxon, and A. L. Sponsler of Kansas. Music was furnished by T. Fred Henry, and other entertainment by Dunbar Colored Quartet, Japanese Song Birds, Chamber of Commerce Quartet and Fort Des Moines Quartet.

J. Q. Lauer: I want to take this report up a little further, particularly with reference to legislative matters that were taken up at this meeting and that were carried out, as you know, at the last session of the legislature. Of course, the big item was the matter of state aid, and your board of directors was appointed as a legislative committee. The legislative committee got together and finally determined to go after an increase of $700, making the maximum $1,500, and worked out their plans along those lines. Somebody, of course, had to take the initiative, and, as is customary, the bulk of the work was thrown upon me. However, I got all the support that I asked from the legislative committee, but at no time did we feel as though it were necessary to come down here in a body. The committee was willing at all times to be on the spot if the occasion required, but it didn't become necessary. I don't know that it is necessary for me to go into details as to just how the plan was carried out—you people, I guess, generally are familiar with the literature sent out, but I do want to express to the resolutions committee the request that they pay particular attention to the matter of thanking, in the way of resolutions, both the House and the Senate, because they gave us wonderful support. Of course, there were objections which you will always find in connection with an appropriation that means fifty or sixty thousand dollars a year, and sometimes it seemed discouraging, but the ultimate results were more than encouraging for the labor that was expended in its passage, and the bill as it now stands is familiar to all, and it is a bill that is applicable from one year to another.

The one feature with regard to attendance at the agricultural convention may be a hardship in one way, but that topic has come out at every meeting of this organization and has been fully discussed. The amount that you receive in state aid is due to the untiring effort of the members that are faithful toward the organization, and the law should take into consideration the efforts that we have been putting forth in securing legislation increasing these amounts, and for that reason we feel that they ought to take more interest in the organization that brought about these benefits. The Agricultural Convention has been sparsely attended in days past, and so the legislature felt that in some way they should make it compulsory upon the person receiving the state aid to attend this meeting, and that is the reason it was inserted into the law.

The matter of printing the report which you people have, was in the old law. And so it was not changed in the law as contained in this new bill. In revising this bill there was quite a few letters from senators to me to the effect that in order to get their support we must make it obligatory that the awards be printed. Now the matter stands in that way. I have had letters from some of you people with regard to what it cost you. The plan we carried out at our fair and the one I would suggest to you is, at the time of your fair, print the awards as local news.

The other was the matter of county aid to the county fairs from the board of supervisors. I don't know whether you people have got that confused, or not. That is a law where you can get your county supervisors—it is not obligatory, it is entirely optional on the part of your supervisors—to give you this aid, and since I came to this meeting I have seen a few who have received $1,000, and I want to tell you that the board of supervisors can give it to you each year and take it out of their general fund. Understand, it is up to them!

Another matter, the amendment to the law with reference to insurance, which was passed two years ago by the legislature. I can explain it best by giving you the experience of my own fair as a criterion. Two or three years ago no mutual association or farmers mutual could insure fair ground property or municipal buildings, but that has now been changed so as to permit it. If you people will get after your mutual societies you will be able to save money on your insurance premiums, and you should have no difficulty getting the business because the fair grounds are owned by the people interested in the insurance company. In our county we have gotten our insurance in a mutual company for $22,000 and last year our assessment was a little over $8. You can speak all you want to of the expense of coming down here, but if you will take that up with your insurance officials, you will save yourself a big piece of money, and will be well repaid for your expenditure in coming to this meeting. As I say, $22,000 was taken out on our property last year at a cost of a little better than $8, and I can cite you to several similar cases.

With regard to our pamphlet, I want to extend at this time my appreciation to the attractions people who bought space in it and made possible its publication. The people who paid for that advertising practically paid for that book, and I want at this time to extend to them the thanks of the convention for their support.

At this time I want to say that there are only two fairs in the state of Iowa that do not belong to the association,—that is of the old, original fairs that have been receiving this state aid, and in total there are only eight fairs in the state of Iowa at this time that do not belong to this association. There were seven fairs in Iowa this year that were new fairs, and two of them have already joined. There is a fair that is going to be organized for next year and they have already joined.

I might in just a few words explain something about the requirements of membership. The question came up in a discussion this morning, what requirement or what was the origin of the condition of membership. In the legislature four years ago we had the state aid raised from $300 to $800, and I am sorry to say that the association was short of funds, as they always have been, and so a committee was appointed to find a means of meeting the indebtedness, something more than $600, incurred in getting that $500 increase. A good many of you are familiar with the original Taylor bill, as it was termed, and the expense in connection therewith, and so this committee went to work and made a proviso similar to this, any fair receiving the full amount of state aid was to pay $25, with no fair to pay less than $10—it was ten, fifteen and twenty, and that is the way that there was created the matter of membership payments.

I was at the Chicago meeting with Mr. Stanberry and Mr. Bacon. Mr. Stanberry and Mr. Bacon made that trip in connection with other business, but I went just for the fun of it, and it was noticeable at the meeting of the International Association, the pains they took in the selection of their officers. They didn't say, "Well, let's have him, he's a good fellow," and spontaneously elect him, but they said, "Let's take great care in selecting our officers this afternoon, and let's select them carefully." That's the attitude we should take. Get a man that is interested in the work, and if you are voted upon as a member, don't refuse to accept it. The organization is getting to a place now where it is of influence. So when selecting officers this afternoon, let's do it with some forethought, and not, just because a fellow happens to come here regularly, elect him to an office, but let's select our officers with a great deal of care, and let's don't deteriorate by selecting inefficient officers.

I have a few words more with regard to several recommendations I want to make. I would recommend that these suggestions be taken up in the course of new business this afternoon. One of the recommendations I would make is that we change the name of the association. Now, I don't know who is going to be our secretary next year, but whoever is your secretary, you can save him a lot of work and labor if you eliminate a part of your present title. At the present time it is the Iowa Association of County and District Fair Managers, and I would suggest and recommend that this afternoon we take up this matter for discussion and change the title of your association to read The Iowa Fair Managers Association.

I understand there are some boys expecting to be here from the state of Missouri. I also had a letter from some of the boys up in Minnesota who are anxious to attend our meeting. They cannot attend as members now, and I recommend at this time that we take up this afternoon during our business meeting a change in our constitution or by-laws in order to permit us to take in these representatives from other fairs outside of the state of Iowa and to make them honorary members. I am putting that in as a recommendation, and I am also at this time recommending that you people appoint a committee to again take up the matter of annual dues with this object in view: The association four years ago gave you a continual membership, and I am recommending at this time and am asking you to take up for discussion this afternoon the matter whereby your membership is only of yearly duration. What I mean by that is, all those who are paying the dues today are entitled to the benefits for this ensuing year. Your membership in the past has been continual, and I am suggesting that your membership shall be annual, and your membership paid at this time is for the ensuing year. I am asking that that be taken up this afternoon as a part of the new business.

In attending this meeting in Chicago I was impressed with the things that the state organization had for topics, and I couldn't help but feel that it would be a mighty fine venture for somebody to undertake to have either a representation by invitation from them or by request from us if they would provide a plan whereby state organization of this nature could become a member, or if we could get together and get in touch with every state organization in the United States and form an organization of our own. I know it is possible—all things are possible, and I would like to have that come up for discussion. They have a strong organization in Illinois, in Minnesota; they have one in Nebraska, and I don't know how many more there are in the country. I don't know just how to get in touch with them, and I suppose there are states where they have no state fairs where they have a county fair organization. I am not necessarily putting in a recommendation pertaining to that, but I would like to have it come up for discussion to have a national association of county fair organizations.

The work during the past year has been more than agreeable to me. Those who attended our meeting in Waverly know what kind of an organization we have. I was sorry I couldn't attend, but I was down to Des Moines, and I went back there just preceding the conclusion of the meeting and I was sick for three weeks, and the only person I saw at that meeting was our friend Stanberry. I was under the doctor's care and I couldn't get out but I want to extend an appreciation to all of you people, and especially to those that took particular interest, not in a physical way but in the way of correspondence, in the legislation of last winter. It was more than favorable to me to get conditions arranged and rearranged that I never could have carried out if it hadn't been for your individual efforts in seeing your representatives and senators. It would have been absolutely impossible to have got the results that we did in my own estimation if it hadn't been for that co-operation.

I also want to thank at this time the Board of Agriculture for their efforts in our behalf. They had troubles of their own and they were as busy as they could be, but they lent us every assistance that was available to them to help in getting this bill passed. I have sometimes wondered that Corey didn't have me kicked out of his office, because he worked his mimeograph and his girls there for us, and I want to thank those people for the assistance that they gave you through me in making this thing possible.

I might cite you an instance of the difficulties we had to meet. One day I was down here when the bill was going to come up before the appropriation committee of the House. When I went in there they had this original bill drafted by the attorney general's office and they left out the enacting clause. I didn't know that it was absolutely necessary for an enacting clause to be a part of the bill, but they promised to take it up if I had it changed. I had it corrected and they took it up and passed it out of the appropriations committee. It came up for a vote just before noon, and by wise manipulation one of the fellows on one side of the house offered an amendment, which was a matter of a readjustment of the percentages, and it did sound good to the people there, but it meant practically everywhere from $10 to $100 less aid to the smaller fairs, and you can see just what condition a fellow would be in with that before him, but it went through and was adopted. When they adjourned for dinner I met a number of them and they said, "We have done better by you than you expected," but some of the fellows began to figure out what would be the result and found that it meant the difference of from fifty to a hundred dollars on certain fairs, and then they got together and circulated a motion to reconsider the amendment, and at the next session they reconsidered the bill and passed it as originally drawn. And so they took it over to the Senate. It was getting along close to the end of the session, and it was finally located over in the appropriations committee of the Senate, but there were three members of that committee that opposed it, and that's where I really got discouraged, and things did look dark, and I said, "She's gone as sure as thunder," but I came down here and commenced telegraphing to folks on the outside to bring pressure on their senators, and we got the bill passed.

If you people want to ask me with regard to the work of passing the bill, I'll give you whatever information I can.

I thank you!

The Chairman: When I came down here yesterday morning I was admonished by Mr. Lauer to be very careful about calling on a certain fellow for a talk, that he'd talk a long time, but I want to say that if that fellow can beat Quince Lauer, I want to get them together sometime and let them go to it. However, we can forgive him because his heart and soul are in this work and he is full of his subject.

Gentlemen, you have heard the report of the secretary, what is your pleasure?

Motion by Mr. Williams, seconded by Mr. Mericle, that the report of the secretary be adopted. Motion unanimously carried.

The Chairman: There are one or two things I want to bring up at this time that Mr. Lauer mentioned which I don't believe are quite clear to you. One of them is the matter of the county aid. Now, I believe that all of you understand that the bill was amended so that all county fair associations can receive annually $1,000 from their county simply by asking for it through the board of supervisors. You should take advantage of that. I think a great many county fairs have. We, up in Webster county, have, and we got our $1,000 from the county, and the board was very willing to grant it to us. All you need to do is to go after it with determination.

On a request for information, it was found that 16 fairs represented, out of 90 in the state, had procured the county aid from the board of supervisors.

E. W. Williams (Manchester): I just want to take a moment. I think I had as hard a time as anybody to get that aid. Last year, our first year, I had quite a time with our board. The original county-aid bill was put through the Thirty-seventh General Assembly providing for aid one year, and in the Thirty-eighth General Assembly was changed to read any year. Now, if you happen to go after your county aid at a time when politics has got anything to do with it, you are going to have a battle. In my experience the question is divided, some are with you and some are against you. I am going to make a suggestion. I am going to get county aid this year, and to get it I labored just three days, and I am telling the truth when I say that on two of the days I didn't get my meals at dinner time. There was one man that held off on me, and I'll say that I was up against it, but I telephoned around and started five men out with a petition, and that's the only thing that brought him across. And I would suggest this, if you know your supervisors personally, go to it; but if you do not, before you mention it to them, unless you have one man there you feel satisfied with, start your petition. The petition might read something like this: To the Honorable Board of Supervisors: We the undersigned respectfully petition your Honorable Body to allow the County Fair the county aid as provided in chapter 85, etc. Some county boards don't think a bit of making the appropriation, and others will, but I find this, that the petition does the business, and puts it right before them. Be careful and don't get too many business men, because they'll think it is a scheme of the city men to get the money, but, to make a long story short, I get 50% farmers outside of our city limits, and I didn't have any trouble at all in getting their assistance.

That is just a suggestion from one who has been through the mill.

The Chairman: That is a very good suggestion on the part of Mr. Williams.

J. M. Hathaway (Turin): I would like to inquire whether we can get that $1,000 each year or just once?

The Chairman: Each year. We had the law amended at the last session of the legislature so that we can get it annually.

Mr. Hathaway: We got it a numbers of years ago.

The Chairman: You are entitled to it each year now. That suggestion of Mr. Williams' is very good. You are entitled to the thousand dollars—go after it! There is another thing I want to emphasize, and that is this insurance proposition. That is another law we had fixed here two years ago, and that is the matter of allowing county mutuals to insure fair grounds. I known in several instances where they saved the associations lots of money. Go to your county mutual insurance company and put in an application to have them accept your fair property.

E. J. Curtin (Decorah): The mutual insurance company turned us down. Those fellows don't know that there is a law that will permit them to do it.

The Chairman: Show them where the law will permit them to take it.

Mr. Curtin: And they said the manager of our mutual insurance company is a member of the board of supervisors, and he said it was a different thing than farm property; that it was a fair ground and that should be in a different class, and they wouldn't look at us at all, and then the agents heard we had been flirting with the mutual company and now we have to pay about twice what we had to pay before we talked to them. We did everything but pray, and I think we'll try that next.

The Chairman: I think most of the mutual companies will accept your insurance. I tried the same thing down in Webster county, and the mutual man said: "We can't take your fair ground property, the law will not permit us to," and I said: "Oh, yes, it will," and he said: "No, it don't," and I said: "All right, then, if you don't take my word on the law for it, you'll have to learn somewhere else," and he has since been down to the convention of the mutual companies here and they passed favorably upon it. By the way, there was a resolution spread upon the records two weeks ago here in Des Moines in which they recommended all mutual societies take over fair ground properties. Some of these farmer agents think that they are a little bit selfish; they think that the mutual companies were formed exclusively and particularly for the farmers, and I think they were, for that matter, but the fair association is something that a farmer is interested in. It is advertising the farmers business, it is not the town fellow's business. I think you will have no trouble if you go back after it. I think the mutuals have tornado policies too.

J. A. Benson (O'Brien): I just arose on this insurance question. I am interested in a mutual company and your difficulty with your county fair insurance is that there are vacant buildings on the grounds which are often occupied by tramps, and they are really more hazardous. I think there is no windstorm company will refuse them if they are closed. I am president of an insurance company that insures such property all over the state and while I wasn't at the convention when that resolution was passed, I think you will find mutual associations unwilling to take your insurance on the county fairs. Some of them will and some of them won't; it is more hazardous, there's no question about it. At our fair we have something like ten or twelve thousand dollars worth of buildings, and it is impossible to keep tramps out of them. They break the locks and sleep in the straw, and because of their smoking it is more hazardous. Here is a question I want to ask, and it is concerning the matter of state aid. We have a district fair right close to the county line of four counties. One of those counties has no fair at all, one has a large successful county fair, the other not so important, and in our own county we have a county fair that has not been very important. I am wondering if the county fair as well as the district fair could get a part of the $1,000. Would the little county fair get the state aid, or would the district fair get only a part of it?

The Chairman: It will be possible for you to get only one aid, $1,000 is the maximum.

Mr. Benson: I was asking about the distribution of the county aid, where we have a district fair with all of our officers in O'Brien county and the county fair in Sioux county.

The Chairman: The law states that the board of supervisors of the county in which the fair is located can grant this aid. I know of cases where both fairs have gotten it. Both fairs can make application and get the $1,000, as I understand the law. There is no limit to the number of fairs in the county. They can get the aid if they ask for it. The law says "any fairs" so that if there are two fairs held in one county, they can make application and get the aid. By the way, didn't that happen down in Black Hawk county, the Cattle Congress and the county fair?

Mr. Estel: No sir, the Cattle Congress didn't ask for it.

W. D. Strayer (Cedar Falls): While acting as president of the state Supervisors Association I made it my business to be interested in the fair associations and to have this particular subject on our programs. It was taken up at our convention in Muscatine in August and quite thoroughly discussed, and it seems to me quite favorably received throughout the state by the majority of the supervisors. There was no resolution passed or motions on it, but everybody seemed to be quite favorable to the proposition. I think that is all I care to say on it.

Mr. ....: In reply to this gentleman back here who speaks of the hazards of fair property. Take your fair property with water protection and you have no hazard at all. That's the argument we use at home. Have your buildings all clean and that will reduce the hazard quite a bit. Our people didn't consider it as hazardous as a farm building. In our county there are more farm buildings destroyed than fair buildings throughout the state, but we have got water protection in the fair ground and it is not with us considered as hazardous as a farm building.

The Chairman: I want to state this about this matter of hazard. That is largely prejudice! Two years ago the fellows used that argument and we made them lay down their cards. We said: "Now, you say this is a hazardous risk—prove it." They were unable to prove it, so we went back over a period in order to make our statement clear and absolutely binding—we went over a period of ten years with reference to fair grounds and found the loss to have been less than $20,000, and we said: "If you will show us a farm risk with an equal amount of liability that has a less loss than that, we'll give up," and they were unable to do it, absolutely. So you can see it is largely imagination of it being a hazardous risk. You don't very often hear of fair ground losses in the state of Iowa. When you stop to consider the amount of money that is carried—insurance carried by the fair associations, you may know that the risk is very nominal as compared with other risks.

Mr. Hathaway: How many fairs here are insured by mutual associations?

The Chairman: We haven't taken that up yet.

Mr. Beckner: Have you any valuation of the fair property in the state of Iowa?

The Chairman: It is contained in the year-book. It is in this report here, I think. If it is not, it will be in the year book, at least. All that information is given.

Mr. Bacon: With reference to the county aid, where the supervisors give the county fair $1,000 each year. In Clay county, for instance, where the supervisors have purchased the ground and given it to the fair association and the county for the purpose of conducting the county fair, I was wondering whether we would be entitled to the $1,000 in addition.

The Chairman: Absolutely, you are entitled to it. Any county fair that is conducted annually is entitled to the $1,000.

J. I. Overholt (Spirit Lake): Is there not a limit placed on that for counties of a lower population?

The Chairman: No sir, it says that any county fair can procure from the board of supervisors $1,000 annually.

Mr. Overholt: We asked for an appropriation this year, but they cut us down to $900.

The Chairman: They did that of their own volition and accord.

Mr. Mullen: Does this money have to be used for buildings?

The Chairman: It says to pay debts and for improvements on the grounds. However, I don't think the board will check anybody up to find where the money went.

The time is passing rapidly and we have a big program to go through, so we will pass up these topics right now and go on to another subject that is to be considered during this forenoon session. The first thing is "Should Concessionaires Secure Licenses?" This discussion is to be led by Mr. Roy E. Rowland of Oskaloosa. Is Mr. Rowland of Oskaloosa, here? If he is not here, we will pass up this topic until he comes later in the day.

There is another matter that we want to take up, and that is shall we arrange for a sociability booth at the state fair? It is suggested here that Minnesota has such a booth where all of the secretaries throughout the state may gather and have headquarters. What I understand by a sociability booth is a booth at the state fair that is a sort of headquarters, and our thought is to arrange a headquarters at the Iowa State Fair for the purpose of assembling and disseminating knowledge and touching elbows, etc. Personally, I think it would be a good plan if the state fair would allow us that privilege. First, I think we ought to hear from Mr. Corey or Mr. Cameron. * * * Well, if they aren't here, Mr. Mullen, the vice president, is.

J. P. Mullen (Fonda): The implement dealers have headquarters in Machinery Hall, and I don't think there would be any objections from the State Board of Agriculture for this organization to have headquarters, and it just seems to me that the appropriate place for that would be in the speed department. Mr. Curtin is here and I would like to hear from him if he could take care of you people, or not. It is my opinion that the speed department would be the proper place for this organization to be taken care of. The other departments take care of the associations that come in direct contact with them.

Mr. Curtin: That's what I call Irish repartee. I guess that's about what it is. Certainly the speed department would be more than honored to have the secretaries' organization meet with them, but I am afraid that before they got to the meeting place, because of the many gates they would have to go through, some of them would rather give it up. I believe it is a good suggestion, and I am sure that the fair board would be glad to set off some little place in the Administration building—some little room in there for the secretaries' headquarters. I think it would be a fine thing. The only thing is somebody would have to be there to keep an open house, which I am sure could be done, and would be a nice thing. If they don't I will be glad to have you at the speed department.

The Secretary: My idea in this thing was to have this organization appoint somebody to be there and take care of that booth, and also take care of that particular department. At the Minnesota fair they had a quartet while I was there. They had the booth in the center of a large building where they had an orchestra, and the secretaries came there and registered and received many courtesies extended through the state board. They were brought there and were kept in touch with that particular place. I think that the headquarters should be at such a place where the secretaries and their wives, and all of them, could come together and be accessible to the people.

Mr. Simpson is here. Did the county fairs have a booth in which they could assemble while you were at the Minnesota state fair?

Mr. Simpson: No, I don't think so.

The Secretary: Maybe that was inaugurated after your time. My thought was to have it in Floral Hall or in the Administration building. I saw one or two booths empty in that building and it seems to me that it would be a fine thing to use one of those booths, and it would help us along very much.

The Chairman: It occurs to me that the proper thing would be to have a headquarters of the county and district fair managers in the Administration building and some one in charge of the room—perhaps the officers of the state association, and the secretary could be in attendance during the week and lend such assistance as possible to the visiting secretaries of the state. I thing the suggestion is a good one and that can be disposed of by a motion if there are no further remarks on the matter.

Mr. Montgomery: I move you that Mr. Lauer take charge of that booth at the state fair.

The Chairman: Excuse me, but I think it would be well to offer a motion that such a booth be established provided it is agreeable to the Board of Agriculture. That would be the first thing, and then it is another matter to name some one to take charge of it.

C. N. Nelson (Bedford): Wouldn't it be necessary to have a committee to wait on the state fair officials to see whether such a booth could be had?

The Chairman: That's a good suggestion.

Motion made by Mr. Nelson, and seconded by J. L. Bailey that a committee be appointed to wait on the state board of agriculture with reference to the headquarters for the fair managers.

The Chairman: Mr. Montgomery, will you withdraw your motion?

Mr. Montgomery: Yes sir.

The Chairman: The motion is that a committee of three be appointed to consult with the state fair board concerning the establishment of a headquarters at the state fair in the Administration building during the state fair, to be appointed by the chair.

The Secretary: Mr. Chairman, I cannot see why we should appoint a separate committee. I am going to offer an amendment to that, that the newly elected officers or board of directors be a committee to take up the matter of quarters at the state fair for the Iowa Association of Fair Managers. I offer that as an amendment.

C. F. Simmermaker (Tipton): I'll second the amendment.

The Chairman: I understand this to be an amendment to the original motion. You have all heard the motion and amendment. Are there any further remarks?

Mr. Nelson: I will accept the amendment.

Motion as amended unanimously adopted.

The Chairman: The next topic on the program would open up quite a wide discussion, and it seems to me that it ought to wait until after lunch.

We have a topic here entitled "Should Concessionaries Secure Licenses?" and in the absence of the leader I'll ask Mr. Scholfield to give us his version of the subject.

Mr. Scholfield: Well, I haven't made any particular study with regard to it for the simple reason that I expected Mr. Rowland to take up the subject; but in my opinion I believe that every concession man should have a state permit. In that way you are going to do away with the non-essential concession men and I believe it will be of benefit to every fair association. Those are my own opinions, and while I haven't gone into the matter thoroly, to see how it could be worked out, I believe that by that means the undesirables could be eliminated. Everyone of you have that class of men on your fair grounds, and it is your desire to do away with them. You can get a better class of concessionaires to come in by doing that, and you are sure of your money, and you have a great deal less trouble.

I would like to hear from some more of you with regard to it before taking up a discussion of the whole matter, because I am not in a position to go into it in detail, because Mr. Rowland was supposed to take that up, but I believe it is a subject that will stand a great deal of consideration.

The Chairman: E. W. Williams is also one of the assistants on this topic. I would like to hear from him until Mr. Rowland comes into the room.

Mr. Williams: I am like our friend Scholfield, I haven't made any preparation on the thing, but I think Mr. Scholfield's remarks are right in place. I don't think of anything further that I could say until Mr. Rowland is here and gives his version of it, because a man who has put thought on it is better prepared than the man that talks at random. I think it is up to us to solve the question. In giving our opinions we are keeping our own troubles in mind, and since talking with our secretary, Mr. Lauer, sometime ago on that subject, I can think of no better way. There is one avenue I have thought of, and I think we are going to open up a worse sore than we have now, so I won't mention it, but I think there should be some protection to the fair secretary. The state sends out men to tell us what to do or what not to do once a year. Your fair may do something agreeable to themselves, and your people won't stand for it. I think the topic has more to do with dealing with undesirables and giving the secretaries some protection. A man comes onto the ground and asks for some space for a certain concession, and we give it to him on faith, and yet in ten minutes he is setting up a different proposition altogether. We as secretaries have given him space for a concession which we in our own mind believed to be within the law. I had that experience this year and I still contend that I was within the law. At the same time men will come along and install a game that any sane man knows there is not a chance in fifty to beat, and he'll let that go, while the neighboring fair will not permit it. I am firmly of the believe that we ought to find out what we can do and what we cannot do. I have a place in mind where they made all their expenses this year on things that if I had had them upon my grounds I'd have been run out of town and wouldn't have got state aid.

At this time, I think Mr. Lauer's suggestion of some kind of certificate that we can go by is essential. It is all wrong that some fairs can get by with things not in accordance with the law while we who are trying to stick to the law are prosecuted. You fair people may want it or like it, but some one comes along and says you are off. The thing that aggravates you more than anything else is if you have two men inspecting the fair, and the first one says this is O. K., which is the worst thing on the ground, and the next man comes along and says for you to stop something that we think is all right and that the first man has passed. I think that Mr. Lauer's suggestion is absolutely timely and I would be in favor of finding something to go by that is absolutely gold-lettered to the finish.

Carl Leytze (Sioux City): We haven't lost a dollar in concession money in two years. We don't allow any games of any kind.

The Chairman: Do you allow any shows?

Mr. Leytze: Yes sir, we have carnival companies.

Mr. Scholfield: We have more trouble with the shows than we do with the games.

Mr. Williams: I would like to ask Mr. Leytze what he considers games that they wouldn't allow there.

Mr. Leytze: Any pitch games, or things of that sort.

The Chairman: How about punch boards?

Mr. Leytze: It don't go.

Mr. Nelson: I would like to ask how they handle a carnival company with no games?

Mr. Leytze: I don't consider it a game.

The Chairman: Don't they run games?

Mr. Leytze: No sir.

The Chairman: What company have you had?

Mr. Leytze: We have Worthams. They got more money last year than any other carnival company that ever showed on our fair grounds. The men that run the games with the show simply run lunch stands and they pay just the same as other concession people do, and it makes a mighty good proposition and we think it is worthwhile.

Mr. Bacon: There are two evils we have to contend with, concessions that personally, as a fair secretary in this state, I would like to see eliminated at a fair, and that is gypsy and negro concessions. I attended two fairs last fall, at one of which, right across from the entrance, was a camp of a hundred or so gypsies, and every woman or child who attended the fair had to go by them. I also attended a beautiful new fair grounds with a beautiful entrance, and across the road in the bushes and brush was a dirty lot of gypsies, with kids running around all over the road, and it was really an eye-sore, and we had trouble up in our county and I myself tried to get our committee to eliminate them, but they let some in during my absence and the consequence was they paid a big price for their concessions and when they left the farmers took an inventory of their things and found they were short on clothing and everything, and the farmers don't think very kindly toward the fair on account of that.

Mr. Nelson: It was our county that he refers to. We ran those gypsies out of our fair ground; we ran them out of one gate and they came in another. I am with him on that subject.

The Chairman: You aren't the only one that he referred to.

Mr. Curtin: I think Mr. Corey issued a statement embodying what the attorney general said was gambling and what was not gambling, and I guess what was gambling two years ago is gambling this year, it is the same thing, and when he comes this afternoon he can tell you what is gambling and what is not gambling.

The Chairman: But the great trouble is the interpretation of it. Mr. Havner will send out from his office several men to the same place, and one will say that a certain thing can run and the next fellow says it cannot run, and that's the trouble with Havner's office. I guess we are to have this subject up in printed form so as to tell what the law is and what it is not, but it is another thing to enforce it and enforce it equitably. That's the trouble with Havner's office, they don't enforce the law equitably, so that the thing that we are trying to get at here now is to get the thing in such shape that when they have a permit or license from Havner's office, then our troubles are over. We take a man with a permit, and if he doesn't have a permit we don't sell him a concession.

The Secretary: I attended quite a number of fairs this year, and at one fair I saw a game of chance running and the man said it was absolutely all right, and I had seen him closed out at another place just before that, and when I asked him about it he said: "They came up and told me I could run it." I am of the opinion that we all know what gambling is and some of us are willing to go just as near the edge as possible, while others won't consider that at all. It doesn't mean that because a man has a permit you have to have him at your fair, but when Havner's men are going around and inspecting us, as Mr. Stanberry says, one man stopping him at one part of the state and another running him wide open, let him look after Mr. John Doe and license his concession, and if he doesn't run it according to what the agreement was, shut him out, but the individual that comes onto your fair and says that this game is gambling and you have got to stop it, or you have got to prove that it is not, if that fellow has got a permit from the attorney general's office you can say "He has a permit and we cannot stop him," and it was my idea to have him go to work and give a permit and then it would be up to the man that goes out inspecting to see whether he is running on the basis that he agreed.

The Chairman: I believe it is twelve o'clock and we had better adjourn for lunch.

TUESDAY, DECEMBER 9, 1919, 2:00 P. M.

The Chairman: Gentlemen, we will come to order now and proceed with our program. We have a big program for the afternoon and it means we must hurry along to get through with it. We will first listen to the report of the Credentials committee.

Mr. Hoffman: In checking over the credentials of the different fairs supposed to be represented, we find there are 78 fairs that are members of this association and 16 that are not. Of the fairs joining during the past year there was Audubon, Ogden and Jasper. Of the old fairs that do not belong there are two left, Burlington and Avoca, and Spirit Lake was to join during the year. Of the new 1919 fairs that have joined the association there are Osceola in Clarke county, Waukee in Dallas county, Hamburg in Fremont county, Webster City in Hamilton county, Ottumwa in Wapello county and Fort Dodge in Webster county. Of the different ones, there are 78 paid up and 16 not paid up, therefore there are 78 people here today entitled to a vote, and the secretary will call the roll with regard to who they are.

The Chairman: I don't believe it is necessary to take the time for this roll call at this time.

The Secretary: We will call the the list of those who have not sent their credentials to the secretary and see if by some mistake we have missed them.

Secretary calls roll of absentees.

If any of the fairs called have representatives here, pay your dues and get your credentials in the parlor in here and we will appreciate it very much.

The Chairman: The next on the program is a paper by Miss Neale S. Knowles, Ames, Iowa, entitled "Uniform Classification for Culinary Department." Miss Knowles found it impossible to be here and Mrs. Louise H. Campbell is to substitute for her. We will now listen to Mrs. Campbell, of Ames College.

Mrs. Campbell (Ames College): This afternoon I just want to talk a little while on the premium list—that is, regarding the foods and the clothing and the fancy work at our fairs. We have been going over the state from the Iowa State College visiting the various fairs and assisting in the improvement of exhibits. I, myself, have been in the state nearly eight years, and for less than three or four years the women who have been going out from Ames judging have been becoming dissatisfied—dissatisfied with the work they have been doing, dissatisfied because they have felt that the things they have judged have done the people very little good; that is, that this fair should be educational, and just because we put a blue ribbon on an angel food cake, or a blue ribbon on a loaf of bread, doesn't mean anything to the people in general, so one of the things we have worked out is a little score card. Now, by a score card I mean this: This is bread, what is the flavor of that bread? Is it yeasty, is it salty, is it musty? If it is yeasty it is because the yeast has been overcome by bacteria, perhaps due to the fact that the woman failed to wash her bread pans after baking bread, and that food in the bottom of the pan becomes rancid affects the bread. An ill-flavored bread is an expensive bread, because you keep piling on the butter to overcome the taste, and with butter at 85 cents a pound you want to be as economical as possible. You could cut down on the butter by putting in more salt. How are we to reach those women? By simply having a card like this. This card will be put on each loaf, and it will give a criticism of the bread. If it is impossible to reach these women, as we try to do, on the afternoon after the judging and give them a talk on bread and what we determine is a loaf that should have 100 per cent, this card serves very nicely.

Now, the lack of interest in the old-time food and clothing exhibits makes us just wonder if we are on the right track. Women have seen those cases of bread piled up there for years and years, and they said "It looks pretty good; it's fine," but what are they getting out of it unless we can go right there and talk to them? Then there is an economic food waste there—a tremendous waste. I have gone in farmers' institutes where I know that the food that goes into those food classes is worth three or four hundred dollars, and I know that they carry the bread away in bushel baskets to get rid of it, and, after all, what did the people get out of that great big exhibit? I had 99 cakes at one place to judge. Take into consideration the time and labor of the women, to say nothing of the value of the food, and there were only three premiums—and very small at that. I feel that we want to give fewer premiums, but boost the premium on that thing. For instance, let's give a great big premium on the best yeast bread. Bread is the staff of life. Bread and butter is the gold-headed cane. Bread and butter are essential for the normal growth of children, and in our butter exhibits we want to push the butter score card up—that is, the premium on that, and on good bread. If we have but one class of bread, and we put the premium at $5.00 on that class of bread, people are going to enter. Any woman that can get $5 for a loaf of bread will put her best efforts on it, and when that woman carries off that $5 premium out of perhaps 150 loaves of bread, she has won a real prize. So I want every woman in the community to realize that that is her fair and that she should do something to make the fair better this year than it was last year; and so again I would like to have this food properly disposed of. It is a crime to waste the food as we have wasted it. Exhibits should be in harmony with the various lines of community work. Our fair should be a reflection of what we are teaching in our schools. You men know just as well as I do that the high school girl's dress today is—well, we are having some trouble. In one of our colleges last year one girl bought twelve pairs of shoes in nine months. One girl that I know of that goes to college has a check book and she is allowed $50 a month for spending money—$600 a year. Now, to help our young people, and to get this idea across, I would like to have in the fair things on exhibit that these high school girls are taught are standards—middy blouses, Peter Thompson suits, underwear—the rational, wholesome, fine-material kind. I want a premium put on such things. I want those girls to feel that that's the thing; I want to raise our standard of proper dress. I want the girl to find something as standard in a way that is pleasing to her. I want to show out of the school, at the county fair, at the state fair, at the interstate fair, if you please, what these girls are being taught. It should help us many, many times, through the colleges and through these high school boys and girls, to reach the father and mother. We will get in a great big lot of folks if there is a community club and there is a premium given for the exhibit of these garments they are making. The feeling will be

"It is Mary's, and Mary lives out in our neighborhood," and they come and look at it, because there has been so much work put on it. I have judged in institutes, for instance, aprons. I hold up those aprons to the light, look at the hems and look at the button holes and see if they are stitched neatly, and wherever I find something that should be criticised I stick in a pin—and some of the garments when they are sent home are stuck full of pins. The object is to make the exhibit educational—the value, again, of that judging card; you have the card for a tally, and as you judge the garment you mark the card. I like to have two women work with us in order to get the thing done quickly, and then frequently I have taken the time to talk as I judge. You can get a lot of things explained while they are right there. The value of the lecture next day is great if the women come, but they aren't always there. Why, just think what this thing means! We send our girls to college to get this work, but the mothers cannot go to college, they cannot close up their house and go to school, but they want these things, so short lessons are given to them for just an hour on the next afternoon. Just explain your reasons for making the awards, taking the best and the poorest (they keep still about the poorest, but usually everybody knows whose the best is).

The importance of uniform classification—I would like to have the whole state classify just the same—one county just the same as another county, using the same premium cards. I have had quite a bit of criticism for this lack of uniformity. I have heard a great many remarks that they did so-and-so over here, and so-and-so over there. The automobile is used so extensively in this day that people go back and forth and see much more than was possible in days gone by, and I think it would be better to use uniform classification. Honestly, it's a crime, some of the things that are put up there and what these fair people are paying for them. If you are going to have things made during the civil war period, let it be entered as an antique, but don't put those things in with up-to-date things. A fair should be educational, and it's a crime some of the things that are sent up from Missouri and other places, box after box of them! Why, things that aren't presentable—things that are so dirty, things that are so soiled, absolutely—well, unpresentable. Remember the importance of putting new life into the exhibit by putting in novel features. We are dead, so to speak. We have got to put ourselves so that people will come in. One of the things I would like to see would be household booths. I would like to have the originality of the women in your county exhibited. I would like to have a township or community club showing all of the modern devices for the saving of labor in the home—dustless mops and home-made fireless cookers—things that are educational, and people will come and see and say "Why didn't I know of that before?" I want the women to learn all of the new tricks of the business. Nine out of ten women do not have any help. One woman wondered how far she walked and got herself a pedometer, and she discovered that she walked 13 miles on an ordinary day, and from 15 to 18 to get a Thanksgiving dinner, and about 5,000 miles per year. She washes dishes 1,095 times, she washes the clothes 52 times, she scrubs the floor twice a week or 104 times, and then we wonder how it is she gets time to send things to the fair. I want her to be able from this county fair to take usable things home so that she can just turn around and adopt in her own home what ideas she got at these household booths. If she visits the booth she will see the scrubbing chariot, if you please, and she will want it. Many of us have to get down on our knees to scrub the floor, to get into the corner, etc., and this chariot is a small platform that is padded and runs around on casters, and is much easier on the housewife than getting down on the knees.

Then we'll want child welfare booths. When you stop to think that every third child under five years of age in the state of Iowa is under-nourished and under-weight, you think there is something wrong. I have just come in from the national stock show—I was there 15 days; I looked at that stock and I sometimes wondered if those men who went home with blue ribbons on their stock, if they had sent in their children, how would they be scored? Would they be blue-ribbon children? Would they? I want the mothers of the state of Iowa to raise this standard. Think of it, every third child under-nourished. The children are fed everything, and very often things that they shouldn't at all have. So I want this child welfare booth and a good big premium, say $25, put on it, and let these mothers, young mothers, see some of these things and they will stop and look, and have a county nurse there, a Red Cross nurse or county nurse to talk to the people, the home people, to push that thing. What is our county fair for, and why are we raising better stock—it is simply to make better homes and a better fair, and the outcome of it should be we should go home better off because we have seen some educational things. I know we all must get recreation, but there are some other things besides that. So we would have the household booth, the child welfare booth, and these other departments, all to work jointly with the high schools and the teachers of home economics over the state, giving premiums on the exhibits that they have before them, so that they can work out and show the results of the schooling at the fair, and let these girls see what can be done, and let these girls show a lot of grown-up women.

There are a lot of things that women are not making today. What's the use of putting premiums on those things? Of course, everything must be made within the last year, but are they in your fair? I should say not! Another thing, shall the canned fruit be opened or not. Miss Ellison and I have talked this over and we say that it should be opened at the judge's discretion. There are a lot of things in those jars that wouldn't stand inspection if opened —sealed in there for two or three days, and that's about as long as they keep. In an exhibit I found a lot of jelly made of gelatin, and on a hot day it will melt—see? I found a lot of vegetables put up in cold water, which will keep them only two or three days. I don't believe in opening unless you have to—it's a terrible waste unless they can be used. I was at the state fair in Minnesota and they had some home economics teachers and students there, and just as soon as the jar was opened they gave a demonstration of the cold-pack method, and it worked out very nicely. It is also a good plan to sell the material after the judging is over with. Those that want to sell it say so. I would lots rather have it sold than have it go to waste. We have tried to economize in various ways by limiting the classes. For instance, we have just two kinds of pie on the premium list—apple pie and cherry pie, both are grown in Iowa. I don't know but it would be better, instead of putting in pies to put in tarts—that shows the crust. The pie crust is the difficult thing to make. We have put in just three cakes—angel food, just raised by air, the butter cake—the women are too busy and butter and sugar cost so much today to make the best they can, and if we aren't going to make a frosted cake, just make a cup cake, with brown delicious shortening just right. All right, who can do that? If there is a woman in the neighborhood makes that and takes off the premium I want that woman to understand it is her duty if she knows that to tells others about it. I want her to know that she in turn should go out and be a missionary. We want her to carry this thing through and make it a worth-while exhibit. We want every woman in the county to feel that it is her fair. It is her fair! And put something in not because she expects to get a premium but because it is the county that she lives in and she wants her county fair to be up to the mark.

If you have any questions or suggestions I wish you would ask them. We have cut down on preserves and preserves and preserves, and I wish you could see how some women have worked and worked and worked to get those unheard of things on the list so as to get that premium. We have given prizes on four classes of jelly so as to build up the exhibit, see? But because a woman may make good apple jelly, is no sign that she'll make good jells of other kinds, and so we have made up four classes; but we have had apple and pear and peach, and eight or ten or twelve different kinds of butter. If a woman can make one or two really truly good butters, she can make the others, see? The apples we raise in this state; the plum, the cherry we believe in stressing and having the women make the best they can of those. We have tried out dried fruits and dried vegetables, and we think they should be encouraged, and the vegetables that we make soup of, that are especially good; and then there is canned pork and chicken. We are talking culling chickens all over the state; we are going to cull out the flocks, and if that fowl is properly prepared it can be eaten. I want the women all over the state to know how to can chicken, beef, pork, mutton and then I want them to make hard soap and soft soap. If she is going to butcher and has a lot of food she cannot use, let her turn around and make good soap of it. Sorghum is another thing. And a home-made tray wagon is another thing made of an old kitchen table, attaching big wheels. Let's have more of those things there that can be made into worth-while things, and home-made vegetable and fruit driers. Put some of the boys in manual training to work on them. And the best bottle of milk, as to cleanliness, flavor and percentage of butter fat. Davenport has put on the biggest campaign that has ever been put on in the state. We haven't milk enough in this state. We have got to push that thing! Good wholesome, satisfying, suitable milk is the nearest perfect food. Right here in Des Moines they are feeding it to the children a half a pint in the morning and a half pint in the afternoon. Let's have the cleanest and the best milk in the state, and let's give a premium on the good, clean milk, and get the women interested in the milk to feed to the babies.

I think I have perhaps given you some idea of what I want from the home put into the fair, good or bad. I many times have thought the best lesson is learned from the poorest thing. I have sometimes had some of the worst loaves of bread preach the greatest lesson, and I am going to say to you men to put up premiums on these things and you'll have your eyes opened. Some women couldn't bake a loaf of bread properly unless she turned it bottom side up, because it won't brown. This is the point—do you know that the women of this state, and the United States, are keeping our hospitals too full? Do you know that we are employing too many nurses? Just because women don't understand foods. It is not just the mixing, but it is the planning of the meal, the right things to put together and whether they bake properly. That family that eats doughy bread year in and year out, mark my word! they will feel the effects of that in years to come. I want bread properly baked; I want good, wholesome butter; I want the women to can vegetables and fruit; raise that standard and get it just as fine as possible to eat during the cold weather, the winter months. During the cold winter months I want her to fill her empty jars with meats to eat during the hot weather. I want her to raise the standard; I want her to understand what she is doing; I want her to read the lastest work on dietetics. Why shouldn't she? Iowa is the wealthiest state in the Union, but does Iowa's home come up to the standard? We have got to a place where we have money, we can have good pictures, good coloring in the home, good books, good magazines. Let your fair bring that thing out and make our home life better because of the county fair work, and have it so attractive that women will follow it with deep regret if they cannot go, and have the exhibit explained in detail so that it in turn will be a reflection of the colleges of our state, the state university, the teachers' college, and Ames, those three state institutions, to say nothing of the many others. Let that fair show what these things mean, so that the people that win a premium will really feel that they went into the game and worked hard and that they have really taken a prize. That is, have a worth-while fair.

Is there anything else?

Question: Would you accept exhibits that are not in the premium list?

Mrs. Campbell: Well, that's a hard thing for me to decide. Sometimes I think it is a good thing to do it, especially if it is something current, if it came up during the past year, and if it is a necessity to get an educational point over, but I don't think it is a good policy, lots of times, to make exceptions for women who have some little oddity in the way of a decorative novelty that is not so different from others. I wouldn't open up a premium for her unless it is something educational.

Mr. Harvey: I would like to ask Mrs. Campbell if it would be possible for some of our ladies taking care of our booths to write you on questions of this kind?

Mrs. Campbell: We would be very glad to assist them. In fact, that is just exactly what we want.

SUGGESTED PREMIUM LIST FOR COUNTY FAIRS AND OTHER EXHIBITS.

SUGGESTIONS FOR HOUSEHOLD EXHIBITS.

The housekeeper who says, "This is our fair and I must do my part in making it a success," understands the real purpose of the exhibit. She knows that its success depends upon the generous co-operation, good fellowship and friendly spirit of contest that is shown by the housekeepers.

A first-class exhibit must be large. The number of entries marks the number of public-spirited housekeepers. It is true, however, that many large exhibits fail to be first class because the articles are not of high quality. The gaudy, shoddy, poorly made article tells its story of inefficiency just as emphatically as the clean, well-made, up-to-date article tells its story of efficiency.

If the household exhibit in each community is not larger and better this year than at any preceding time, the only logical inference is that the housekeepers of that community fail to look upon the exhibit as a means of education. They fail to assume their share of responsibility toward making the fair a success.

Three very vital steps must precede improvement; first, a recognition of defects; second, a recognition of higher ideals; third, a recognition of those methods that will help to bring about those ideals.

It is the chief purpose of all contests, household or otherwise, to create a greater desire for improvement through the recognition of defects, the recognition of higher ideals and the recognition of better methods of work.

The score card helps to emphasize the essential points of excellence.

SUGGESTIONS FOR SUPERINTENDENTS AND ASSISTANT SUPERINTENDENTS.

ARRANGEMENT OF EXHIBITS.

Arrange all articles in classes and within easy reach for judging. Much of the success of the exhibit depends upon the good taste and good judgment used in arranging the articles.

SUGGESTIONS FOR FASTENING TAGS TO BAKED GOODS.

A package of new hair pins provides the most convenient method of fastening tags securely. The two prongs of the pin make loss of tag impossible. If pins are used they must be at least four inches long and have large heads.

WORK OF ASSISTANTS.

The duties of assistants are as follows:

1. Place articles before the judge.
2. Help in locating articles to be judged.
3. Assist in cutting bread and cake when necessary.
4. Remove articles as soon as judged.
5. Assist in fastening ribbons.

EQUIPMENT FOR JUDGING.

1 sharp bread knife
1 pair scissors
3 teaspoons
1 small basin
1 hand basin
1 hand towel
2 yds. cheesecloth
One table covered with oilcloth to be used when judging bread and other foods

HOME ECONOMICS—DEPARTMENT I.

DIVISION A—FOODS.

Class I.—Bread. Bread Score Card.

Flavor	20
Lightness	15
Sweetness	10
Porosity or grain	20
Color	5
Crust	5
Shape and size	5
Quality of crumb	20
	100

Bread should be baked in individual pans, about 4x5x10 inches in size. A loaf of this size makes a good appearance and is much more apt to be thoroughly baked than is a larger loaf. Bread should be at least twenty-four hours old when judged.

1. Loaf of yeast bread..............................$5.00 $3.00 $2.00

Class II. Cake—Cake Score Card—Unfrosted Cake.

Flavor	10
Texture	25
Lightness	25
Quality of crumb	20
Shape and general appearance	10
Crust	10
	100

Frosted Cake.

Flavor	10
Texture	20
Lightness	20
Quality of crumb	20
Shape and general appearance	10

Crust	10
Frosting and filling	10
	100

1.	Angel Food Cake (unfrosted)	$3.00	$2.00
2.	Chocolate Loaf Cake (white frosting)	3.00	2.00
3.	½ dozen white tea cakes baked in muffin pans (unfrosted)	2.00	1.00

Class III. Pie—Pies (Two Crust) Score Card.

Under crust	35
Upper crust	25
Filling	25
General appearance	15
	100

1.	Apple pie with two crusts	$3.00	$2.00
2.	Cherry pie with two crusts	3.00	2.00

Class IV. Canned Fruit (Pint Jars Preferred)—Score Card for Canned and Preserved Fruit.

Appearance—	
Color	15
Clearness	10
	25
Selection—	
Quality	10
Uniformity	5
Appropriate size	5
	20
Preparation—	
Density of syrup	10
Removal of skins, spots, etc	10
	20
Pack—	
Arrangement in jars	10
Amount in jars	10
	20
Container—	
Label	5
Neatness	5
Package (seal)	5
	15
	100

1.	Exhibit of canned fruit, each exhibit containing 12 varieties	$5.00	$3.00	$2.00

Class V. Preserves (Pint Jars Preferred).

1.	Strawberry preserves	$2.00	$1.00
2.	Raspberry preserves	2.00	1.00
3.	Cherry preserves	2.00	1.00
4.	Ripe tomato preserves	2.00	1.00

Class VI. Jelly—Jelly Score Card.

Appearance—	
Color	10
Clearness	10
Lack of crystals	5
	25
Consistency	30
Flavor	25
Container—	
Seal	10
Label	5
Shape and size	5
	20
	100

1.	Collection of jelly, not less than 4 varieties	$2.00	$1.00

Class VII. Canned Vegetables (Pint Jars Preferred)—Canned Vegetables Score Card.

Appearance—	
Color	15
Clearness	10
	25
Selection and Preparation—	
Quality	15
Uniformity	5
Appropriate size	5
Removal of blights and spots	10
	35
Pack—	
Arrangement in jars	10
Amount in jars	10
Shape and size	5
	25
Container—	
Label	5
Neatness	5

Package	5
	15
	100

1.	Exhibit of canned vegetables, each exhibit consisting of eight varieties	$5.00	$3.00	$2.00

Class VIII. Meats (Pint Jars Preferred)—Score Card for Canned Meat.

Pack—	
Appearance	20
Color	15
Fullness of jar	20
Amount of meat in jar in relation to fat and meat stock	20
	75
Seal	20
Label—	
Size	2
Placing	1
Design	2
	5
	100

1.	Jar canned chicken	$2.00	$1.00
2.	Jar canned beef	2.00	1.00
3.	Jar canned pork	2.00	1.00
4.	Jar canned sausage	2.00	1.00

Class VIII. Sour Pickles (Pint Jars Preferred)—Pickles Score Card.

General appearance (color and clearness)	20
Choice and preparation of materials	15
Size and uniformity of pieces	20
Attractiveness of pack, garnish, etc	15
Texture of material	25
Container	5
	100

1.	Mustard pickles	$ .50	$ .25
2.	Cherry olive pickles	.50	.25
3.	Beet pickles	.50	.25
4.	Cucumber pickles	.50	.25

Class IX. Sweet Pickles (Pint Jars Preferred).

1.	Ripe cucumber pickles	$ .50	$ .25
2.	Green cucumber pickles	.50	.25
3.	Watermelon pickles	.50	.25
4.	Apple pickles	.50	.25

Class X. Dried Fruits and Vegetables (Pint Jars Preferred)—Score Card for Dried Fruits and Vegetables.

Selection—	
Age	15

Freshness	15
Uniformity in size	15
	45
Preparation—	
Removal of blight and spots	15
Uniformity of shape and size	15
Cleanliness	15
	45
Appearance—	
Color	5
Package	5
	10
	100

1.	Dried corn	$ .50	$ .25
2.	Dried soup vegetables	.50	.25
3.	Dried apples	.50	.25
4.	Dried peaches	.50	.25
5.	Dried plums	.50	.25
6.	Dried cherries	.50	.25

DIVISION B—MISCELLANEOUS.

Class I.

1.	Quart glass jar homemade sorghum	$ .50	$ .25
2.	Pound homemade hard soap	.50	.25
3.	Pint homemade soft soap	.50	.25
4.	Quart jar of sulphured apples	.50	.25
5.	Homemade Fireless Cooker	2.00	1.00
6.	Homemade Tea Wagon	2.00	1.00
7.	Homemade Vegetable and Fruit Drier	2.00	1.00
8.	Bottle of milk (tested for cleanliness, flavor and per cent of butter fat)	2.00	1.00

DIVISION C—EXHIBIT BOOTHS.

Class I. Household Booth.

1. Best booth set up by rural club or township. Exhibit to include production, preparation, preservation of food and clothing. Also home conveniences and other household interests......$25.00

Class II. Baby Health Booth.

1. Best booth showing baby health exhibit. This booth to be set up by rural or town club. To illustrate best methods concerning food, clothing, bath, sleep, and play................$25.00

DIVISION D—CLOTHING AND TEXTILES.

Most books state that entries should not be more than two years old. Nearly every book includes the following which have not been made the past two years. Practically all of these classes might be eliminated:

Silk quilt
Worsted quilt
Mountmellick embroidery
Norwegian embroidery

Velvet quilt
Satin stitch embroidery
Silk embroidery
Punch work
Hardanger
Drawnwork
Point lace
Wallachian embroidery
Coronation braid embroidery
Mexican drawnwork
Battenberg
Eyelet embroidery
Cut work

Crocheting may be retained, but useless things should be ruled out as:

Filet lamp shade
Solid crochet curtains
Solid crochet dresses
Solid crochet undergarments

Rules.

1. All articles must be entered in the name of the maker.
2. All articles must have been made within the last year.
3. Only one entry can be made in each class. Name of owner must not be placed on any article competing for premium.
4. No premiums will be awarded on articles improperly entered.
5. Unfinished articles will not be awarded premiums.
6. Worn or soiled articles will not be awarded premiums.
7. Articles having no competition will not receive prize, unless worthy.
8. The judge will not award prize to any article unless worthy.
9. All needlework will be judged with regard to beauty, degree of perfection, amount of work and suitability for the purpose for which it is intended.

Score Card for Needlework.

1. Material—	
a. Suitability	10
b. Quality	10
2. Design—	
a. Suitability	10
b. Beauty	10
3. Workmanship—	
a. Stitches	5
b. Appearance on wrong side	5
c. Appearance on right side	5
d. Fastening of threads	5
4. Decoration—	
a. Suitability	10
b. Artistic design	10
5. Color—	
a. Color of material	10
b. Color in decoration	10
	100

Suggestions for Classification.

A doily is less than twelve inches in diameter.

A centerpiece is from twelve to twenty-four inches in diameter.

A lunch cloth is more than twenty-four inches in diameter.

Class I. Clothing for School Girl.

1.	Cotton school dress	$1.00	$ .75
2.	Wool school dress	1.00	.75
3.	Envelope chemise	.75	.50
4.	Night gown	.75	.50

Class II. House Dress and Apron.

1.	Cotton work dress	$1.00	$ .75
2.	Work apron	.75	.50

Class III. Crocheting.

1.	Set of six doilies	$1.00	$ .50
2.	Centerpiece	.75	.50
3.	Lunch cloth with six napkins	2.00	1.00
4.	Guest towel	.75	.50
5.	Dresser scarf	.75	.50
6.	Bed spread	2.00	1.00
7.	Yoke for undergarment	.75	.50
8.	Set sheet and pillow cases	1.00	.50
9.	Collar	.50	.25

Class IV. White Embroidery.

1.	Set of six doilies	$1.00	$ .50
2.	Centerpiece	.75	.50
3.	Lunch cloth	1.00	.50
4.	Guest towel	.75	.50
5.	Dresser scarf	.75	.50
6.	Set sheet and pillow cases	1.00	.50
7.	Night dress	1.00	.50
8.	Chemise	.75	.50
9.	Baby dress	1.00	.50

Class V. Tatting.

1.	Set of six doilies	$1.00	$ .50
2.	Centerpiece	.75	.50
3.	Lunch cloth	1.00	.50
4.	Guest towel	.75	.50
5.	Dresser scarf	.75	.50
6.	Yoke for undergarment	.75	.50
7.	Set sheet and pillow cases	1.00	.50
8.	Handkerchief	.50	.25
9.	Yard sample of tatting	.50	.25
10.	Collar	.50	.25

Class VI. Colored Embroidery.

1.	Blouse with hand work in color	$2.00	$1.00
2.	Dress for adult with hand work in color	2.00	1.00
3.	Dress for child with hand work in color	2.00	1.00

Class VII. Pillows (Filled and Finished).

1.	Embroidered pillow for infant's carriage	$1.00	$ .50
2.	Sofa pillow for living room	1.00	.50
3.	Porch pillow	1.00	.50

Class VIII. Bags.

1.	Bag for general laundry	$ .50	$ .25
2.	Shopping bag	.50	.25
3.	Knitting bag	.50	.25
4.	Party bag	.50	.25

Class IX. Rugs.

1.	Woven cotton rug	$1.00	$ .50
2.	Cotton braided rug	1.00	.50
3.	Wool braided rug	1.00	.50

Class X. Quilts.

1.	Cotton pieced quilt	$1.00	$ .50
2.	Cotton applique quilt	1.00	.50

Class XI. Collar and Cuff Set for Dress or Coat.

1.	Lace and insertion set	$ .75	$ .50
2.	Hemstitched linen set	.75	.50
3.	Cretonne set	.75	.50
4.	Muslin set with crocheted edge	.75	.50
5.	Muslin set with tatting edge	.75	.50
6.	Muslin set with embroidered edge	.75	.50

Class XII. Lamp Shades.

1.	Handmade lamp shade for living room	$1.00	$ .50
2.	Handmade lamp shade for bedroom	1.00	.50

Class XIII. Machine Work.

1.	Rompers	$ .75	$ .50
2.	Machine darning	.50	.25
3.	Bound buttonholes	.50	.25
4.	Set-in pocket	.50	.25
5.	Coverall apron	.50	.25
6.	Middy	.75	.50
7.	House dress	1.00	.50

JUNIOR DEPARTMENT.

Any girl under twenty years of age may compete for premiums in the Junior Department.

Class I. Canned Fruit (Pint Jars Preferred).

1.	Individual exhibit of canned fruit, each exhibit containing 12 varieties	$5.00	$3.00	$2.00
2.	Club exhibit canned fruit, each exhibit containing not less than 12 varieties	5.00	3.00	2.00

Class II. Canned Vegetables (Pint Jars Preferred).

1	Individual exhibit of canned vegetables, each exhibit containing eight varieties	$5.00	$3.00	$2.00
2.	Club exhibit of canned vegetables, each exhibit containing not less than eight varieties	5.00	3.00	2.00

Class III. Bread.

1.	Loaf yeast bread	$5.00	$3.00	$2.00

Class IV. Cake.

1.	White loaf cake with chocolate frosting	$3.00	$2.00
2.	Loaf spice cake, unfrosted	2.00	1.00

DIVISION F.

Junior Sewing.

1.	Cotton school dress	$2.00	$1.00
2.	Wool school dress	2.00	1.00
3.	Coverall apron	1.00	.75
4.	Envelope chemise	1.00	.75

5.	Night gown	1.00	.75
6.	Underskirt	1.00	.75
7.	Cotton smock finished with hand trimming	2.00	1.00
8.	Middy suit	2.00	1.00
9.	Voile collar and cuff set, hemstitched	.75	.50
10.	Collar and cuff set with wool embroidery	.75	.50
11.	Pair hand embroidered pillow cases	.75	.50
12.	Embroidered guest towel	.75	.50
13.	Crocheted edge on guest towel	.75	.50
14.	Holder	.35	.25
15.	Sewing bag	.50	.25
16.	Sewing apron	.50	.25

The Chairman: I might say that Ames will provide you with the suggested premium list in this department. In fact, I think they have mailed out promiscuously to the fair secretaries of the state this suggested list.

We will have to eliminate any further discussion on these topics until later. We will hasten now with the program. We have a lot of extra numbers that aren't printed on our original program which is now in your possession.

We are fortunate in having with us this afternoon W. H. Smolinger, secretary of the American Trotting Association of Chicago, and I am going to call on Mr. Smolinger for a few remarks. W. H. Smolinger.

W. H. Smolinger (Chicago): Mr. President and Members of the Iowa Fair Association: It is always a very great pleasure to me to meet and be present at a gathering of this kind where the different things and subjects are discussed for the betterment of the county fair. I was enjoying myself very nicely until your cordial president called upon me to make some remarks. He has no sympathy for me and less for you, and the only good thing about it is that he will have to be bored with the rest of you. It is certainly an inspiration and conducive to a growth of enthusiasm to see assembled here so large a gathering representing between ninety and one hundred fairs, all domiciled in the same commonwealth. I think this is the largest gathering of county fairs I have ever had the privilege of attending. It is said of the state of Iowa, and statistics prove it, that Iowa produces more pork than any other state in the Union. It has its nearest competitor beat several times, and none ever hopes to approach you. It is also well known that there is no state in the Union that has more herds, both large and small, of registered beef cattle than the state of Iowa. Your dairy industry is advancing by leaps and bounds. I doubt if there is another state in the Union that can do what Iowa does. If you put a Chinese wall around the state of Iowa and prohibited the receiving of an exhibit from the outside, Iowa could give as good a livestock show, and as good a fair, in that condition as that splendid show that they put on last fall. There must be a reason for all this! It didn't come about by itself. The county fairs each and every one have done your bit to bring this about. It has been by your efforts and by the teachings, by ocular demonstration, that has advanced Iowa to such an illustrous place in the roster of states. You have just reason to be proud of your work, and your work has just begun, it is in its infancy. The amount of good that the county fairs can do is incalculable. You know all about Ames college and all that it stands for. There is no place it could have existed had it not been for the sentiment created and fostered by your county fairs. In the present day and age it is generally considered that the old way of farming must go, that it is gone. The idea of working hard on a farm, hard enough to break down your health and break your neck for four or five months in the year and toasting your shins before the fireside the balance of the year, is a thing of the past. The farmer must be productively busy for twelve months in the year. Have you ever thought of what a bad example your county fair sets to the farmer when you think that 95 plants, representing a very large investment, are standing idle out there, to be used only one week out of fifty-two? Every county, I guess, in the state of Iowa has a farm adviser. The farm adviser is supposed to bring to the farmer the knowledge that is stored up in all the institutions of learning with regard to agriculture. His work, however, cannot be a success unless the farmers tell him what they know about the peculiarities of the soil. There is a large work to be done in every county which no agricultural college will ever take up or ever can take up. I believe that every county fair should get in touch with its agricultural agent or county agent, whatever the name is, and say "Now, here's our fair grounds; we'll employ the help; you put in the crop." That can be up and out of the way before fair time. Every county fair should use it centerfield. Take a half-mile track, how large is the centerfield? The center-field covers just about twenty acres, and it would be pretty nice to have a 35-bushel wheat crop come out of there at the present price per bushel. So that, taking that as one, you have got a lot of things to solve. Iowa has all kinds of conditions. The land in one county is river-bottom, another is reclaimed swamp land, another prairie, and in another county it is slightly undulating. In some of your creeks you are sending down more fertility in one year than you take out in raising a crop. You cannot send a thousand circulars or a thousand lectures to the county, and you cannot tell him how to stop it, but you can put on a little demonstration at your county fair and show him how to stop it and make a success to it. You have all been urged to build silos, and a silo is a wonderful thing, there's no question about it. One of the first things they told you was to put it in awfully green, and then they told you to put it in pretty nearly ripe, and now they say that the riper the corn is the better silage it makes. We all know that the silo loses one-third of the feeding value of the kernels of corn that go in there, and I wonder why they can't still be filled with the stalk and the corn saved? Why aren't those things solved at the county fairs? If you put on that kind of thing you will be building up the educational value of your fairs.

I believe, if you haven't state legislation, that you should have legislation which would permit each county to own its county fair grounds. There should be legislation permitting a small assessment on the people of the county to put up permanent buildings and a small assessment for maintenance. The idea I want to convey is to make your county fair productively busy for 52 weeks in the year.

I guess I have said about all that I ought to say about the county fairs, but it is a subject that is pretty close to me, and it is one in which I am deeply interested. I suppose you expect me to say something about harness racing and the conditions that exist. It would be foolish for anybody to try and get up before an assemblage here and try to tell them about the close connection there is between harness racing and the fair—the two have grown up together. The fairs have made the harness horse, and by attracting the people to the fair the harness horse has helped to make your fairs. His popularity is increasing every year. The war is hardly over and yet we have in this country representatives from England, Denmark, Sweden, Holland and Italy buying horses—harness horses, to take to those countries. The harness horse, as the Iowa farmer knows, is the greatest horse that has ever been trained and makes good anywhere and everywhere. He can outsaddle the saddler, he can outhackney the hackney, and he can cover more ground than any other horse on earth. There has been a good deal of talk by the speed departments about the scarcity of harness horses at the present time. Such inquiries can be answered yes and no. Yes, because so many fairs in the country, not only in the state of Iowa, but other states, believe there is no other time quite so good to hold the county fair as between the 15th day of August and the last of September. The American Trotting Association alone has about sixty or seventy meetings—about sixty meetings a week during that period, and you can imagine the number of horses it takes to supply them all with horses. There is a great deal said, as you men know who read the harness papers, about the cause of the decrease in the harness horse and there have been made long arguments. Some of them have said it is because the parent association didn't have the right kind of legislation; others said it was because the Registry association wasn't sufficiently busy, and others have said it was another thing, that breeding began to decrease when the American Trotting Association was formed. We premeditatively close our eyes to the real cause. No one of these things had anything to do with the breeding of harness horses. The coming of the automobile made the road horse less in demand from year to year, and even the man that didn't buy an automobile was driven from the road with his road horse. This didn't leave any outlet to the breeders of horses that weren't efficient in racing, and consequently that and the strict enforcement of the anti-betting laws in a good many of the states have reduced the breeders. When the physician changed from his good old road-horse to a pile of inanimate, bad-smelling junk, we lost more breeders than from any other cause, because the physician, when his old road mare got sore-footed, he bred her and raised a good colt. On the other hand, more horses measure up to the standard required at the tracks than ever before. There is during the meet season a scarcity of horses, and this is one of the things that the rules committee has to take into very careful consideration—that is to adopt such rules, if possible, that will give you more horses to draw from and at the same time so that the rule will not be a discouragement to the breeder. These are problems that are not easy to solve. They are hard to get at. A proposition was made by a gentleman who is connected with the harness racing early in the year that all horses that had not reduced their record in the last two years should be eligible to the 3-minute class. This matter came up before the rules committee and it had a great deal of discussion and a great deal of thought, and finally there was adopted for recommendation to the congress of the American Trotting Association a rule that provides that harness horses with the record of 2:12 on a mile track, and 2:16 on a half-mile track, that haven't reduced their record in the last two years—that is since 1917—should be eligible automatically to the 2:12 class and to the 2:16 class—the 2:12 on a mile track and the 2:16 on a half-mile track for their first start, and be thereafter classified in accordance with the records that they make in winning races. There has been a lot of discussion about this and we don't believe it will do the unlimited good that is claimed for it by the author of the idea; and you must take into consideration in reading the newspaper accounts of what will happen if this rule is adopted, also the fact that one of the first things that a writer for a newspaper has got to learn is to exaggerate. Last night as I was leaving Chicago I picked up a paper and read where some hold-up man had gone in and robbed a pawnshop of probably two or three thousand dollars worth of diamonds, four or five thousand dollars in cash, and yet that paper carried a big scare-head reading "$100,000 HOLD-UP IN THE LOOP." We expect the newspapers to do that and they don't live up to their teachings if they don't do this. I don't believe this rule will bring all the good that some people think it will, nor do I think it will do harm that others think it will, because the horses are re-classified very quickly and it will be a surprise if you will check over the horses that really get much more allowance than they are getting now under the allowance rules.

There is another matter that is of interest to all members of the American Trotting Association, and that is the matter that has been talked of for quite a number of years in relation to the amalgamation of the various trotting horse interests, and I will be very brief about this. It would not be proper and I would be open to criticism if I made any recommendations in any respect, as I am a director in three of the organizations. The oldest organization is the National Trotting Association, with its headquarters at Hartford, Connecticut. It has a board of directors which functions just the same as the American Trotting Association. It was organized and incorporated in 1870 and had the whole field to itself. The conduct of the officials of the association became so arrogant that the members in the west could stand it no longer and they started a revolt and organized the American Trotting Association. At the time of this revolt there were only 350 societies in the whole United States that belonged to the parent trotting association. With a vigorous campaign put on by the American Trotting Association, it was but a few years until the two associations had over 1,200 members, and the breeding of the American trotter was at its zenith, due to the new blood and the vigorous efforts made by the American Trotting Association. The Registry Association was a stock company organized for profit, and it has an authorized capital stock of $110,000, of which $90,000 has been actually issued and paid for. Every share has been paid for in that organization except a very few. When the stock was bought from Mr. Wallace, who had the register, there were a few stockholders outside that, and to them was given stock in the new association for their old. During their existence they have paid to their members 85 per cent of the capital stock in dividends. It has not paid any dividends for quite a number of years, but it is not a pauper as some people would have you think. It has cash assets, all of them good, of about $58,000. The American Trotting Horse Breeders Association was organized a number of years ago as a stock company, and it was organized for the purpose of promoting breeding. The thing they have done is to promote two futurities, and they have been very painstaking and careful, and I think can give a good account of their stewardship. They also tried to publish a paper, and still do, a small sheet, about once a month to their members. They make a statement of their trust fund, but no statement I have ever seen of the general fund. It is these four associations that it is proposed to amalgamate. There are several questions in relation to this question of amalgamation that should be thoroughly considered. The American Trotting Association has the largest number of members; it has, outside of the Registry Association, the most funds; it is the only one of the four associations in which there is anybody present at the annual meetings that takes any interest and discuss live topics; it is the only democratic organization of the four; it is the only one that owns its own home; it is the only one that owns Liberty Bonds; 95 per cent of its membership is within a night's ride of Chicago, its headquarters. If it is the desire of the members of the American Trotting Association for amalgamation, they should not only give their views with relation to amalgamation, but they should also say whether they desire the office removed to San Francisco, New York, or whether it shall remain in the middle west. They should state what kind of new organization they want, whether a stock company or a company devoid of capital stock and a mutual as they have now. They should also say whether they want their funds used for buying of the stock of the corporations.

I wish you gentlemen interested in this matter would think it over thoroughly, and I would like, as I am through speaking now, those who are members of the American Trotting Association whether they are in favor of amalgamation. * * * I don't see anybody here say they are in favor of amalgamation.

I want to thank you for your kind attention; I want to assure you that the American Trotting Association is always at your service, and anything we can do for you at the office it is not only our duty but our pleasure to serve you. I thank you, gentlemen.

The Chairman: I am sure we appreciate that talk of Mr. Smolinger. It gave us a lot of information.

The next on the program is a paper by Mr. Fred Terry. We sort of claim Fred Terry as an Iowa product. I think he was born and raised in this state, and we know of him favorably. He is the editor of the best horse paper in the United States (of course), The Western Horseman, and we will be pleased to hear from Mr. Terry.

Fred Terry, Editor, The Western Horseman, Indianapolis, Ind.:

Mr. President and Gentlemen of the Iowa Fairs Association: After hearing what Mr. Smolinger had to say about the newspaper men, I wondered to myself if I would be credited when I came to say a little something here on the floor. For a great many reasons I am pleased to be with your association today, and I want to thank you for informing me of its dates and asking me to say a few words to you, for I see among the faces present many loyal friends whose helping hand has made the success of The Western Horseman assured.

I am glad to be back in the state for a visit—the greatest state of the Union—with one exception—in the production of the light harness horse, but, gentlemen, you don't have to worry about that, for with your agricultural millions you can go to any state in the Union and buy the best they have and use them as toys, if you want to. I don't believe you object now, do you?

Mr. Lauer has outlined two or three questions which he asked me to touch upon, and to me they are sort of—I think they are already decided in your own minds as to how to solve them. The first question that he asks me is whether or not harness racing is a paying investment for your fairs. The evidence that we have seen in the past two years, particularly during the war time, has shown us that harness racing is the leading feature of your fairs. I know of many secretaries that are at this time considering the enlarging of their grand stands. It is the one entertainment that has amused the people for 45 years, during drouths and wars and floods, and yet today is more popular than ever.

As to the matter of its being a leading feature of your fair, I want to read you a statement made in Chicago a year ago by Mr. Curtin, a member of your board of agriculture, and superintendent of speed—one of the leading fair men of your country, and the best superintendent of speed that ever walked onto a track. This is what he said:

"I think that a large majority of the members of the association present today will agree with me that harness racing is the greatest single attraction that they have had to offer to their patrons. This is the one thing that continues to interest from year to year, and were amusements of different kinds to be dispensed with at fairs, harness racing would be the last to go. I do not believe that this statement warrants any discussion or needs any proof."

District and county fairs are not wholly supported by the counties. In your state you get an appropriation; there is a law that gives each one of you an appropriation if you file for it. This is to encourage the exhibits of agriculture and livestock for educational purposes. To me that means that those exhibits, exhibited at a fair, with a paid gate, without other attractions, would not be a paying proposition. Several years ago in your own state you had one of the best early racing circuits that I have ever known of, the Cedar Valley Circuit—it wasn't dependent upon any other amusement for support, and I was asking a man about it today; I asked him why it wasn't continued, and he said he guessed that the boys thought it was too much trouble to get together—he didn't know of any other reason. Now, down in Indiana we have the Southern Indiana Circuit. There were ten towns in that circuit this year. Purely a racing circuit. Probably a few peanut stands and a few concessions or so, but no other attractions connected with it. It holds year after year successful meetings, and I was talking the other day with four of its members and those four members each had a profit this year of from $2,600 to $7,000 each. That goes to show that the horse racing game is self supporting and that you can combine the two or make a successful fair. It is one of the attractions that the people go to the fair to see, is the horse racing, and is the leading attraction.

Now, a few nights ago—I don't very often go to church, but my folks do, but I went down to a sociable at the Unitarian church. Some folks don't call that a church, but I think they do a lot of good. Mrs. Terry asked me to go down to a little sociable and when I was ready to go home I was over in the smoking room and in a little group of ten or twelve ladies was sitting Mrs. Terry. The ladies asked me to sit down, and of course they thought I didn't know anything else and they started to talk horse to me. They were talking generally, but there was one lady among the bunch that was singularly quiet, she didn't have much to say. These women, I might say, were some of the few in Indianapolis that do go out to the races. This lady that was so quiet said to me, "Mr. Terry, did you ever know of a more lonesome and dejected place than a country fair on an afternoon that there isn't racing?" That lady said something! That would be the verdict of nine-tenths of the people that ever had such an experience.

I am going to tell you another little story about how racing is thought of, and this is an old one to those who have been attending the meetings in Chicago, but I never heard it until last summer. I was on my way home from one of the state fairs and met a leading promoter of livestock exhibits and in talking about races he told me about a Missouri superintendent of livestock—the one that had charge of the pavilion. This superintendent had become very much peeved because he couldn't keep the crowds there in the afternoon to see the cattle and judging when the racing was going on, and so he went to the secretary and made a complaint and said that if he had a band he would show those horsemen where to head in, and he would show the association that they didn't need a racing program. He made the statement pretty strong and that afternoon the secretary told him he believed he would give him a band. The next morning they had a band out bright and early and they had a lot of the boys announcing the exhibits and judging at the pavilion, and that afternoon the secretary of the fair thought he would just go over and see how it was working out. He went over there and just saw a scattering of people, and he asked that superintendent of the pavilion where his wife was and the superintendent said, "Damn it, I don't know; I guess she's over at the horse race." I went home and told the story to Mrs. Terry—and, by the way, Mrs. Terry is one of Iowa's daughters. When I asked her what there was about harness racing that the ladies liked to see, she said, "There's a contest there and you see a new set of people every day and there's an element of chance in it that we all like." That's the first time that I ever was able to get a rise out of my wife, and she came through with the real meat in the cocoanut. There is a contest there. That's the pleasure side of the proposition. The financial end of it is what you are all looking at.

Harness racing, if you had gotten out your program under the old entry system, would pay your association in four different ways: The entry fees, deductions, outer gate and inner gate. I don't believe that there is any other attraction that you have on your grounds that ever paid you four ways, or even two ways. Conceding the point that you give them added interest. I don't mean free entrance, I am off of that, but added interest and make no deductions and you still have two of the main paying features and will pay more than any other attraction at your fair.

Now, Mr. Lauer has asked me another question: Whether or not horse races are becoming unproductive? Never in the history of this country was harness racing so productive. Never was there such a demand for it. I will have to admit that there is a seeming scarcity of horses—Mr. Smolinger doesn't agree with me on that subject, but I think he is quite right about the great number of fairs that come together, but there are two reasons for the scarcity of horses. There has been a lack of breeding on the part of the small breeder and then, too, there have been more poeple demanding harness racing, more fairs, and there will be more of them. They tell me that Davenport is going to be with you—is going to build a beautiful new plant and that is happening all over the country. Secretaries tell me that they aren't able to attract the horses when they have a good program. I believe that secretaries and superintendents of speed are a good deal to blame. I know they are in our state. I will not judge you by ourselves, but I will tell you what they do in our state. A good many of our tracks in Indiana are not well cared for, some of them aren't much more than a cow-path. That is not general, but a good many of them. Some of them are four or five inches deep in dust. They get out a program with perhaps just the names of the horses on the program and when the races are called the horsemen appear, some of them, in blue jeans. Some of that happens in your state—it is not all in Indiana, but I am using Indiana as an illustration. If you think that the people will come to a fair to see green grass and get covered with dust and see men wearing overalls and blue jeans, you have to think again. If you think they are willing to pay 50 cents to see that, you are very much mistaken. Your men must be in good condition; your harness must be in good condition; your buildings must be in good condition, and you must advertise your speed program. I may be a crank on this subject, but the speed programs I see at the different county fairs, not only in Indiana and Ohio, but I saw some of them in Iowa, too, were a disgrace. You have your entry list and the men are there with their race horses. If you put a proper man in charge he can give the desired information on that card—information that the people want to know. If I were putting up a program for a large fair today, I believe that under the announcement of the class and horses I would try to get in a little bit of something regarding each horse in there to give the people a line on them. I think that will make your racing more attractive. I ran onto a pamphlet the other day sent out by the Harness Horse Association and in it is one paragraph that I want to read to you, because it bears upon the question of properly staging your fair.

"The staging of the sport of harness racing is another matter that is largely in the hands of the horseman. Programmers should be licensed and instructed that programs should contain complete and accurate information as to horses, and that drivers be properly numbered and have distinctive colors. A marked copy of such a score card to Registrar Best would make the compiling of the Year Book a picnic compared with the laborious task it is now."

I wish that the parent associations could pass a law that would compel the horseman to wear colors. The grooms should wear uniforms. We should have a uniform program and the programmers should be licensed so that they would have to give the people what they are paying for. I think this is an essential matter and I would like to see this association recommend such a proposition to the parent association.

Another question Mr. Lauer asks is whether or not the horsemen are asking too much for their entertainment. Other attractions cost you a goodly sum. Whether you pay for them outright or whether they come to your fair on a percentage basis, if they are good attractions they are worth the money. The horseman ships his animals to your town, puts on the major program of your fair and I think it is up to you people to divide with him. I think he should have a look-in. This question is getting dangerously near to the questions that the Horsemens' Association have been discussing. I would say that you are not paying the horseman up to the present time any too much for your attraction and you must find some way to make that horseman race up to form. I attended a fair in this state last year—several of them, so far as that is concerned, but one in particular that I have in mind—and there were two races there during the week. In one of them one horse took two heats, another horse took a heat, and then this horse that took the third heat was so fast that he strung the field all the way from the head of the stretch clear to the wire. He was an outstanding horse and it seemed to me that he could have gone on and won—I don't know anything about that, but that is neither here nor there. I didn't say anything about it in the paper, but I was disappointed because I couldn't write a good story about that race. I met the gentleman that conducted that fair at another fair shortly afterward and we were sitting at the ringside and he said to me, "Something must be done to make the horsemen give us what is coming to us if we give them added entrance and make no deductions," and he said, "I am in favor of racing on the every-heat race plan." Now, if you are going to give the horseman as much as they are giving you, I think it is up to them to give you the best they have. Some of them won't do it unless you have some way of compelling them to do it, and I think there should be some way to work it out so that you will be rightly treated.

Gentlemen, that is all I have to say, only, in conclusion, I want to speak of a matter that came up here on the floor this morning—that was the recommendation that a national organization of fairs should be gotten together. I think this is a most vital question. I think it is absolutely right. I think the associations of county fairs of the nation ought to get together. They are a real power and I would like to see it. I thank you!

The Chairman: The next on the program is "Building Up a Fair by Cooperation," by Logan B. Urice, of Vinton, Iowa. I understand that Mr. Urice is now secretary at Vinton and during the past year has accomplished many good things in his county by having built new buildings and other modern improvements. I know we will be pleased to hear from Mr. Urice on this topic and I will now call upon the gentleman. Mr. Urice.

Logan B. Urice (Vinton): I am no speaker, as you will no doubt find out before I go far and I do not pretend to know very much about fairs, as I have only been in the game about one year. It was just one year ago today that I was elected secretary of the Benton County Agricultural Society, and so far as I have gone I like it very much. As soon as I was elected I went out to our fair grounds to see what kind of a plant we had and I found we had a beautiful piece of ground of 25 acres, with a row of old box stalls around the south side, a small amphitheatre and a small building here and there. Benton county has some of the best livestock in the world and I knew that we couldn't expect our breeders to bring their livestock and quarter them in our sheds. Shortly after that the breeders' association had a meeting in our town and I heard one of the men suggest that they ought to have a sales barn in our county. I followed up his suggestion and got them to appoint a committee to investigate the possibility of building a sales barn. I went to our commercial club and had them also appoint a committee to meet with our directors. These joint committees decided that it could be done and they went out and appointed a finance committee. The finance committee went back to the breeders' association and told them of our plans and obtained from them a pledge of about 60 per cent of our estimated cost of the building. We went to the board of supervisors and got a promise from them of county aid. We took it up with the commercial club and they pledged the difference. Our building committee couldn't find plans that suited them, so they made plans of their own. They hired day labor and started our building. A certain county at that time started to stock their community with pure-bred hogs and started a pig club. I went to our county agent and learned that we had no pure-bred pigs at the time and I knew that we needed the best. So we organized a pig club and divided it up into three branches: One a feeding contest, one an inspection contest, and one a judging contest. We solicited the various banks in our community and stockmen and got a total of 45 prizes, 15 in each contest, supplemented by loving cups and sweepstakes cups. It made a very interesting list of premiums and on the last day of the fair the boys brought in their pigs and it was very entertaining to the people from the various communities. The boy who won out was a boy that came some 24 miles with his pig to our town. There were thirty boys who won premiums.

I learned that Ames had a spraying gang in a nearby county that summer, and we got in touch with them and made arrangements for them to put on a demonstration of spraying and I dare say that we will have apples sprayed in Benton county next year because of that demonstration.

We also circularized every family and told them to bring in some of their chickens. I found that a farmer near town was contemplating the building of a model hen house, so I got him to erect it on the ground and let us use it during the fair and then move it out afterwards. He came in and spent the entire four days at the fair, using this model poultry house for his house and gave demonstrations in culling a flock of chickens and demonstrating the benefit of culling. He had samples of tubercular chickens and all kinds of diseases and it made a very interesting exhibit.

I then got a list of farmers having pure grains and we got samples of those from all of the different farmers, samples of oats and corn and wheat that had been tried out in our county. We also had three men from Ames, one on soil, one on farm management and one on chickens. We set up a tent and fitted out offices for each one and I believe our Ames exhibits was one of the most entertaining features of our entire fair.

I then turned my attention to the exhibiting of automobiles, trucks and tractors. I found the different firms had men down in the hope of putting on individual displays. It occurred to me that it might be well to put those all together under one big tent, so we rented a tent 74x25. We took the cost of the tent, added to this our freight, labor, police and lighting, and we also went further and hired an orchestra to play there every afternoon and evening and then we found we could divide this into 35 stalls of two cars each and then we put in an auto show and it was self-supporting. That orchestra that we had put on a vaudeville act afternoons and evenings and it gave us an additional vaudeville act without additional expense. When I was in college I heard a lecturer once say he had asked a noted playwright what he had in mind when he wrote his plays to make them a success and he said that when he wrote a play he had in mind little Johnny in the front row. If he could satisfy little Johnny in the front row, Johnny's parents would be satisfied. And, gentlemen, I want to say to you that that will work out in every instance. When you are building an entertaining program, if you stop and consult Johnny you will have good advice. In vaudeville programs, stop and consider Johnny. It was only a few years ago that I was a Johnny running around on the fair grounds. I would go around and see the vaudeville program and then the next day I'd go back and see the same thing again and I'd leave in disgust and go somewhere else. So in purchasing our vaudeville program, we purchased nine different acts, and to supplement this we tried something different by having a wrestling match on our program. We matched men from Waterloo and Cedar Rapids and nearby counties. We ran these matches one fall between each heat. It relieved the sameness of the program and it makes for added interest in our platform attractions. About this time we got our barns nearly completed. Our sales barn is an octagonal building with a seating capacity of 500, with a 32-foot sales ring. The only criticism I have of it now is that it is a little too small for the fair, but it is about the right size for sale purposes. We then built a horse barn 100 feet long and 32 feet wide with stalls for 50 horses. We built a cattle barn 28x100 feet, but before we had the rafters on we widened it out to 46 feet.

We built a hog barn of 72 pens, and the interest that the breeders took in that is indicated by the fact that the week before the fair started we didn't have nearly enough equipment to take care of exhibitors. The result was we had to build 60 additional hog pens around outside. We had to get a tent for our sheep and we filled 70 of our stalls with cattle. The sales barn proved mighty helpful during the fair. When we hired the judges for the livestock department, we hired them with the understanding that they would give talks on the classes as they judged them. That feature proved a great attraction both mornings and afternoons for the whole three days. The farmers would gather in there in large numbers to hear what was going on and one man living 35 miles from our town made the remark that that fair approached nearest the state fair of any he had seen. He said he had got more out of it than he got out of the state fair—that he had just the same class he had got there, only it was in smaller groups and he could understand it all.

We ran out water from the town and have three water tanks and the buildings are also electric lighted. The entire plant cost us some $8,000. I have a few pictures here of it that I would be glad to show you afterwards.

This may be an old story to you, but I hope some of you may try out some of these things. It did a good thing for us this year—it increased our attendance 200 per cent, it made an increase of 300 per cent in the grand stand and the number of exhibitors, and 400 per cent in concession money and 800 per cent in the number of our livestock.

In closing, I would say that in building a fair by cooperation, the first thing to do is to get the cooperation of your board, and I want to say that I had the finest bunch of men to work with that any fair secretary could hope for. Next, get the cooperation of your county agent. He is the biggest asset you can get. And lastly get after the pure-bred interests and the agricultural interests, and in doing that you will have two or three hundred people back of your fair and that is what makes it pay. I thank you!

The Chairman: I was in Chicago last week at the meeting of the International Association of Fairs and listened to a paper read by J. P. Mullen of Fonda, Iowa. That paper was so good that I have asked Mr. Mullen to read it here at our meeting and he consented to do that. I am going to ask Mr. Mullen at this time to read that paper to you and I know you will appreciate it.

J. P. Mullen, Fonda: This paper was written for the purpose of bringing the question of free space at state fairs and expositions as a relic of the past. It was written from that standpoint. I begged to be relieved from reading it again, but the secretary of your association requested me to do so, so that it is up to you to interpret these opinions in such a way that they may be applicatble to your county fairs all over the state of Iowa. As I read it you will discover that it is not directly applicable to your problem, but you may interpret it as I go along.

Mr. Smolinger requested me a little while ago to solve a problem that all of the mathematicians of ancient and modern times have failed to accomplish and that is to square a circle, but I noticed at dinner that he gave a large order to the waiter and I noticed that he jammed down a square meal in a round stomach. So that he accomplished something that I failed miserably to do, when I said there was 20 acres of wheat in my race track when, as a matter of fact, there is only about one-half of that.

Reading.

"FREE SPACE A RELIC OF THE PAST."

By J. P. Mullen.

This question is evidently broad enough to cover all classes of exhibits, including inside and outside space in all departments of the fair. But as my knowledge is somewhat limited regarding the practice and schedule of prices that obtain in other departments, I will conclude you expect me to treat this proposition from the angle of farm implements and machinery with which I am more familiar. I trust this will meet your approval.

Outside space is usually given free to exhibitors and will receive due consideration in this discussion. This so-called outside exhibit, while composed of many kinds of goods and a great variety of articles aside from agricultural implements, is after all made up to a very great degree of medium and heavy farm and road machinery. So far as I know at the present and for some time past, a reasonable charge has been in effect at most of the state fairs for exhibits in buildings. Especially is this true where the buildings belong to the society.

If there is now any inside space where no charge is made, investigation will doubtless disclose that the exhibitor owns the building.

I might add regarding this phase of the question, and it's worth considering, that it's not so very long ago, and the condition exists yet in many places where the exhibitors show their goods in their own building. At many institutions where conditions of this character exist an agreeable change is taking place, and in some places the old order of private ownership has disappeared. This remarkable change is accounted for by the attitude in recent years of state legislatures who have shown added interest and are keenly alive to the possibilities and opportunities fairs and expositions afford to all citizens in measuring by comparison of achievement, the development and progress of the leading industries of the commonwealth. The policy of permanent buildings by state appropriation is firmly established and progressing to such an extent that the construction of private buildings in many places are scarcely considered and those formerly erected are fast disappearing.

For your information I may say that there is only one privately owned building on the Iowa State Fair Grounds, and it is of little consequence, but negotiations are now pending for its purchase.

For your information I might add that there were, eight or nine years ago, some fifteen or twenty buildings on the Iowa State Fair Grounds owned by that many exhibitors and manufacturing establishments wherein they showed their goods, and it is a fact that those buildings proved dilapidated, they were uncared for. Because of the fact that the men who owned them didn't look after the maintenance of those buildings very much, and they became ungainly, the policy of the board has been for the state to own all of the buildings. The result was that all of those have disappeared. They were torn down. But in other states—in many states, at least—most all of the exhibitors own their own buildings, especially at Minnesota, and the result of it is they cannot charge for that space because the exhibitor owns the building. It is a very undesirable situation. So that here in Iowa, as I have just stated, there is just one small building where exhibits are shown which is owned privately on the state fair grounds.

I mention these matters to show more clearly the added responsibilities and task confronting fair managers in furnishing space to exhibitors who but recently had buildings of their own, besides the heavy expense necessarily incurred in the maintenance of the permanent structures that were erected to supplant the old ones.

It is not possible for any organization with its limited and uncertain resources to build adequately sufficient housing for all the machinery exhibits, nor is it prudent to ask the state to do so. I think it is a well-known fact that charges for inside space vary in price at different expositions and in many cases diminished or increased to meet conditions.

Here it would seem, and may be argued, that uniformity of price would be not only advantageous but agreeable, and yet I cannot see how this solution can be consistently maintained between institutions without considering the location and equipment of the buildings, its commodious arrangement as well as its attractive surroundings; for we find that even on the same grounds, and under the same management, consistency of prices are not strictly adhered to, where disparity of comfort in accommodation exist.

Charging a reasonable price for inside space is readily agreed to, and is not usually a disturbing element between exhibitors and managers for the reason not because it is customary, but agreeable, because it is equitable. As noted before, the exhibitor is relieved from the expenditure of constructing and maintaining a building of his own to house his exhibits. The management assumes this burden, but the exhibitor is not thereby relieved from the payment of an equitable price for his space which will in a measure insure to the owners a reasonable return on the investment, and I am safe in saying that the amount so paid by the exhibitor now is very much less than it formerly cost him. Besides, the exhibitor will readily admit that the accommodations and surroundings of his new quarters are much more preferable and better adapted to the purpose of his exhibit than the old one. The sound judgment of these business men enable them to see the improvement as highly beneficial to their business. It is my observation, then, that the charge for inside space unless very unreasonable is readily agreed to and that the requirements of the exhibitors will steadily increase to the mutual benefit and satisfaction of all concerned.

We now come to the problem of handling and disposing of the outside space, which usually covers about forty to fifty acres of ground. Establishing a price on this space is wholly different and will not be so readily agreed to as in buildings where security and comfortable arrangements are furnished. However, under conditions as now exist with the tremendous increase in the cost of running a fair, the great expense in preparation, labor and material, increased premium and the hundred and one other avenues of outlay necessary to get everything in readiness to promptly entertain the hundreds of thousands of visitors who annually flock to the fair grounds, the managers are taxed with the question of where to lay the burden of meeting this ever-increasing cost. If the prices of admission at the outside gates and grandstand are not increased, where will the burden fall? Increased attendance will help some, but unless unusual, will hardly meet the situation. A slight increase in prices all along the line will become necessary and should not cause alarm, but to convince the machinery exhibitor that he should help to pay part of this increased expense, it will be necessary, in my judgment, to make a showing.

His argument that he is compelled to put up a tent, big or little as the case may be, and arranging his booth is a costly proposition; that he is under the expense of hiring help to watch the exhibit at night, and that the mammoth machinery exhibit, which he helps to complete, is an educational feature of great value, adds to the attractiveness of the show and is necessary to round out the whole spectacle; that the original cost of this open space was very little and that its maintenance is even less; apparently his contentions contain some truthful statements; they have merit and must be not only considered, but answered. It must be shown that the benefits he derives are sufficient to offset the outlay, and leaving a fair margin of profit to the exhibitor; that his exhibit is appreciated; that the thousands of visitors that call at his exhibit are buyers and eventually become patrons; that under no other circumstances could he find such an opportunity of meeting so many prospective customers, nor a better field for solicitation of patronage for his goods; that expenses incurred in putting up his tent or booth, hiring help, would barely pay for a one-page advertisement in any of our agricultural journals; that the fair furnishes him this great opportunity to meet the progressive farmer or the agents who handle his goods, the men of advanced thought from every part of the state, who are usually good buyers with ability to pay.

From personal investigation I find that a great many exhibitors are really amazed at the success of their efforts, the number of orders taken and amount of goods sold—that results are extremely satisfactory, and profits on the venture greatly exceed the expenses. All this can be shown and more; that advertising of this character has a permanent value to the manufacturer in the sale of goods for many years after the goods are exhibited.

With this showing, the exhibitors as good keen business men cannot consistently or seriously object to a fair and reasonable charge for their space. I think I have shown that it is not radical or even unreasonable to make this charge; that it will not distress the exhibitors to any great extent, if at all; that as business men they will cheerfully recognize that the proposition is fair and equitable.

So, considering all the conditions, the arguments that will or can be arrayed for and against the proposition, its inauguration will cause little friction, and I favor a fair and reasonable charge for outside space for machinery exhibits. But even in this frame of mind, I would warn against action of such a radical nature as would tend to disturb the present friendly attitude of machinery exhibitors.

I am loathe to close this discussion without presenting more definitely the method to be followed and the amount of the charge that should be considered. The price per square foot would seem more equitable, but I have seriously considered a price of twenty-five or even fifty cents per running front foot to suit different conditions, with a minimum charge of five dollars. This arrangement would not work a great hardship on even the largest exhibitor, who usually requires a frontage of 75 to 150 feet, while a charge per square foot, even at one cent per foot, and that is as low as could be conveniently considered, would amount to one or two hundred dollars for the big fellows, which would be too much; and without a minimum would not be worth considering from the smaller exhibitor, who in many instances requires only a ten-foot front.

This arrangement will do away with the unsatisfactory practice of some exhibitors in applying for a great deal more space than their exhibits require, to the detriment of late comers who find practically all the exhibit space taken, and in many instances very sparsely occupied. It will have a tendency also to neater arrangement and better classification of exhibits.

I will not dwell further on the details of a charge per front or square foot, but will leave this phase of the question for general discussion, which I trust will follow.

One more point, and I will finish. There is a great awakening in the farm implement industry. Giant corporations are forming and arranging for a titanic struggle for business. Competition fierce and furious will be the battle cry of these captains of industry. The big organizations will endeavor to dominate the field of business, to the exclusion of the smaller ones. But, as usual, the small manufacturers will furnish the real competition, and let us hope that they will ride serenely along in the procession, with the shoals and breakers behind them. But whatever the outcome, the demand for exhibit space at fairs will increase and grow immeasurably in the coming years, so that if any action is seriously contemplated along the line discussed, never was the time more opportune than now.

The Chairman: I am going to call on Alex Sloan. Mr. Sloan is preparing a history of the American and Canadian fairs and he has some very valuable information for us. You all know Mr. Sloan. He is the father of the automobile racing game and he has the pluck and energy to do things. We will now listen to Mr. Sloan.

Alex Sloan (Chicago): I will only take a few minutes of your time and it is on a subject that is entirely new to me. I will say at the start why I am in this particular line of work. Two years ago I was called to Washington to fix up a controversy there with an assistant of Mr. Garfield's, who had issued an order that no gasoline was to be used for any sort of amusement purpose. When I went up to visit Mr. Ruckland for the first time and started to talk of the fairs to him and to tell him the magnitude of the fairs and what they meant, while he was a California oil man (he was probably associated with the Standard Oil Company), he was absolutely at a loss to understand the magnitude of the fairs—the Iowa and the Minnesota fairs. I had to spend an awful lot of time trying to tell him how big they were. I sat at the table with a senator who didn't know absolutely what a large fair represented and he said, "Sloan, can you give us some reference book that we can read on fairs?" I told him I'd try and I went and delved into the libraries and found there was no books on American fairs—not even in the Congressional Library, and I decided then and there that if I was able I was going to hand to the fair people of this country a volume that would be worthy of respect of any one that wanted to know about fairs.

About a year ago this time I received one of the first editions of the history of the great war and I saw how well the fair men took to that. Those that had copies were very much interested in them and showed great appreciation. It was about that time I definitely made up my mind to absolutely give to this country the best volume on fairs that could be gotten together and began taking it up with fair men at that time, and evolved my plan. Within the next three months I want to get together a history of the fairs of this country and Canada. The support of Canada is already assured. I have no selfish aims at all in this and I am even in doubt as to charging in the price of the book the 6 per cent that the banks offer to loan me the money for.

After talking the matter over with my bank I decided to go over to a publisher and guarantee the money, provided it wasn't too great, and he gave me the figures on a 500-page volume, and it will run somewhere between ten and fifteen thousand dollars, depending upon what takes place. He wouldn't give me any assurance on price—it would not be less than $10,000 for the first thousand volumes. Out of that first thousand volumes I am going to send one to every senator in Washington and to the secretary of agriculture, one to the Library of Congress, one to every state library, one to every provincial library in Canada, five volumes to England and five volumes to France. Those are all to be given away so that if a man wants to know something about fairs he can immediately go to some volume that is an authority. While it will be a rather large volume it will contain all the information required. He can find out what the fair at Spencer, Iowa, or any other one of these fairs, amounts to, and who its officers are, and it will give his picture. The state fairs, of course, will be handled on a larger scale, more in proportion to their size; but the general history of fairs will be covered in detail, giving practically every step that has been covered in the development of the fairs for the past fifty or one hundred years, so that anybody can go in a reference library at any state capitol and secure the information desired.

If there has been anybody that has been taken in and absolutely, I might say, petted by the public, as I have been, I really feel that no matter how much I do to hand down to posterity something that will always be authentic with reference to fairs, I cannot do enough to help the men who have helped me. When I talk about the price of these books, and it was estimated that the first thousand copies would cost somewhere around ten or fifteen dollars a copy, I want to remind you that that will include a picture of the manager or the president of the fair. I don't want any action taken on the part of the fair; I don't want any action taken on the part of the association other than an inquiry through your association. I am well known to the Iowa State Fair Board and to a good many Iowa fairs, and I propose to make this somewhat of a monument for myself. I am going to make it just as elaborate as I can, and I will very gladly gamble on it to the extent of two or three thousand dollars, but I am asking those who would like to give a picture and biography of that man, to give a subscription for that book for exactly what it will cost, and I estimate that it will run between ten and fifteen thousand dollars some place. That doesn't mean that the history of the fairs will not be taken care of if the picture is not run in there, because I intend to have every fair in that book, whether accompanied by a picture or not.

The thing I would absolutely ask you not to do is to carry away the idea that I am going to make any money out of it. I don't intend to make anything out of this. Remember, it is almost impossible to convince people that we have as many county and district fairs in this country as we do have, and there isn't a single line in a single library in the United States that I have been able to discover about it. It is the largest institution of its kind in the world that is absolutely without an authentic history, and what I want to do is to prepare a volume that anybody who cares to may refer to it and get information on the subject. And a copy of this volume will be placed in the hands of every senator in Washington and also a copy for the secretary of agriculture, and I want to try to put something in their hands that will be easy to handle.

The Chairman: I think Mr. Sloan has undertaken a task that will be invaluable to the fairs of this United States and Canada. Mr. Sloan has stated briefly the facts of the case. We have no history on which we can depend. We have no data to which we can refer. We are absolutely helpless along these lines, and Mr. Sloan has undertaken a task that will be of great good to the fairs of this country if he carries it out, and I hope he does.

I want at this time to suggest to the resolution committee to get together within the next hour and prepare the resolutions. In your resolutions I want you to take up and discuss the matter of granting licenses to concessioners through the attorney general of the state—whether or not you want to recommend it.

Now, we have with us this afternoon a man whom we all respect and love. I do, at least, and I believe the rest of you do, John C. Simpson of Springfield, Massachusetts, and I want Mr. Simpson to give us a few remarks.

John C. Simpson, Springfield, Mass.: I don't know what Mr. Stanberry wanted to disturb my peace and quiet in the back part of the room for this afternoon. You men are here having your annual meeting and you have subjects on the program you wish to discuss, and I don't think I can add anything to what you have under discussion at this time to aid you much.

This is the first county fair meeting that I have attended in many years, but I have often thought of the years when I used to attend the county fair meetings, and attend some of the county fairs, and I have thought of what an absolute fizzle I would probably be as a secretary or manager of a county fair. I will never forget one time about twenty years ago during the year 1898, I believe it was, the only year since the Iowa State Fair was founded that it took a vacation, that was during the year of the exposition held at Omaha, and at that time the organization didn't have sufficient funds to pay the salary of both the secretary and the assistant, and the secretary decided that he needed the money more than I did and I had better take a vacation, so I took a summer's vacation, and I went back down home where my folks lived at that time at Knoxville. The secretary of the fair wasn't very active. He carried along the work until fair week and then suggested that I come in and help him out. There wasn't much to do because there wasn't much of a fair at that time, and I started selling tickets to the amphitheatre. I think the admission was 30c at that time. When I got through I was $20 ahead, and there was a question in my mind just what I should do with my $20, and finally I decided to turn it over to the secretary, and he immediately engaged me for the next two days. That is about as far as my experience goes as manager of a county fair.

I presume that some of you have been wondering what I have been doing since I went east, and some of my friends try on occasions to poke fun at me because of the conditions we live in down in New England. I have lived there three years now and I can say with all truthfulness that I have learned to love that part of the country. Conditions are much different there than what you have out here. Ninety per cent of the population of Massachusetts lives in the cities, but the other ten per cent, I believe, is as happy and contented as any other farm folks you have ever met. And believe me, lands down there—at least some of them, are anything but cheap. For instance, this past summer after I had sold a place I had out in Iowa, I thought that I wanted a farm down there. I went out to buy a place one day and they asked me $879 an acre for it, and this place was being rented at that time for $100 an acre cash rent. So you do not find all of the good farms, and all of the high-priced farms in Iowa.

The county fairs down there are very prosperous—very prosperous. The savings banks in Massachusetts and Vermont and the other New England states are fairly bulging with money, and most of that money is loaned to men out here to carry out your farming operations here. And mostly western farm mortgages are held by those people.

The present organization that I am associated with is probably unique in that it is unlike any other organization of its character in the country. There are no state fairs or municipal fairs—that is, big municipal or large interstate fairs like in Canada, which is owned and operated by the cities, like the Texas state fair, whose grounds are owned by the city and operated by the organization. There is nothing down there of that kind, except the state of Vermont, where they have a state fair, and they have a state fair in Connecticut; but there are 93 county fairs in the state of Iowa whose fairs are more comprehensive in exhibits and larger in attendance than the Connecticut state fair at Berlin. The group of men that organized and got behind this institution with which I am connected are all large manufacturers. They are men who have a vision; they are men who do things in a big way, and who are very prominent in industry down there, and who feel the high cost of living of their employes and the necessarily hard conditions it makes, places a handicap upon them as compared with their competitors further west, and they believe, and I think they have the right to have the true vision of it, that food production can be greatly stimulated in that section. I believe it is largely a matter, as I said to them, of New England going broke running truck farms and cherry farms. I don't mean that we have lots of dairy cattle down there, but we should have more dairy cattle, but any man that starts out with a dairy herd and milks his cows and sells milk without raising the larger proportion of his feed, is two laps ahead of the sheriff when he starts, and whether he is in Massachusetts or in Iowa it makes no difference. So these men formed themselves into an organization called the Eastern States Exposition and dug down in their pockets and got together one-million dollars to build a plant. They have about 173 acres of land, and aside from that they have about $600,000 in buildings, and the National Dairy Show was held there in 1916. I went there in 1917 and held our first show. The government took our property in 1918 and used us as a storage warehouse until the conclusion of the war, and our second show was held this year. A fair as we understand it out here had never been seen there before. They compared it with the ordinary fair that had been held down there. The first fair held in this country was held in Massachusetts in 1804, so Massachusetts is the home of the first fair, but the show was very well patronized this year and the exhibit was very large and they have taken to it very enthusiastically. At the present time I think and feel that it will do much towards increasing the live stock production in that country. Allied with the exposition we have an organization termed the Eastern States Agricultural League, which has several bureaus, one of the bureaus being the boys' and girls' bureau. Some of the men that put money into the exposition company there have financed this farm bureau to the extent of approximately $350,000 at the present time, running over a period of five years. That money is contributed so much a year for a period of five years. Men like Theodore N. Vail put in $75,000, and other men $25,000. We have at the head of that bureau Mr. Dennison, who has been at the head of the boys' and girls' work at Washington. He started with our organization on the first of December. Another bureau that we have in connection with the organization is the market bureau. That bureau at the present time has been devoting its time entirely along the lines of assisting in the purchase of feeds. The farming operations, as you know, are conducted on a small scale there, and most of those fellows in the last few years have had to buy the feeds necessary to carry on their dairying and farming operations, and through this market organization we have been able to save them all the way from two to ten dollars a ton in the cost of feed to the farmers. They have at the present time, I think about 48 of the 66 counties in New England organized, and this organization that I am at the present time connected with down there, while we, of course, are small compared with the Iowa State Fair and some other state fairs out here, I feel that the organization is doing a good work and that it is growing by the fact, as you will know when I tell you, that next to the Iowa State Fair we have the largest cattle show that has been held by any fair in the country this year. As I said to my friends in Iowa when I went to Minnesota, unless you keep stepping all the time, I'll show you a larger live stock show, especially in cattle, than you have out here. I thank you!

The Chairman: We are going back to the discussion portion of our program, and the first thing we will take up is the topic we had under consideration this morning—games and concessions, shall they secure state license? Mr. Rowland was to lead that discussion this morning. He is here now and I will ask Mr. Rowland to give us a few remarks along this line, if he will. * * * Mr. Rowland doesn't seem to be in here just now. Mr. Frank Young is representative in the legislature from Bloomfield, and he is also listed as one of the persons to discuss this topic. I will call upon Mr. Young for his thoughts on this subject.

Frank C. Young, Bloomfield: I can say this, gentlemen, I am very much interested in this one proposition and I think that it is absolutely necessary. I had hoped that every man here representing a county fair in the state of Iowa would see his way clear to support this measure. I cannot say what in any instance is wrong, or what is right, but I think, in the first place, that it will have a tendency to place our county fairs on a higher plane, and the greatest of all is because we who had our grief this year, it would be taking that responsibility from fair officers which they oughtn't to have to bear anyhow. There has been a lot of discussion with reference to the various claims, and there have been many misunderstandings of what is gambling and what is not gambling, and what will be permitted and what will not be permitted. I don't know and I'll frankly confess I don't know. I didn't know then and I don't know yet, and I've gone to our county attorney and I had him explain it, and I had an altogether different idea of what was gambling and what was not gambling up to the time I had talked with him. We had everything going along nicely down there at our fair—we thought we had everything smooth sailing, and I guess some fellow went to town and snitched or something, I don't know, but we didn't know a thing was wrong, nobody said a thing was wrong, there wasn't an officer came to us and told us anything was wrong, but there was some fellow down there that made us all sorts of trouble and we lost about $100 in concessions. For instance, one fellow had a doll rack and he had a pin wheel, and we thought they were all right, but the county attorney said some was bigger than the others—I didn't know anything about that, and you would naturally expect that; but right on the other side was a fellow with a cane rack and knives, and you would throw a ring and if you rung one of those canes you'd get a knife, and if you didn't you wouldn't get anything, and I said "That's a game of chance, isn't it? You are getting something for nothing," and he said: "No, that's a test of skill." I didn't know that! That is not gambling at all! And he went on and explained to me the difference between a test of skill and a game of chance. He said a horse race was a test of skill between horses, so I don't know what is a test of skill and what is gambling, but I do know this, that this is a simple proposition and it will relieve every officer of the fairs in this state from responsibility in that respect, and when they come onto your grounds and ask for a concession, if they have a certificate from the attorney general, let the man that gets skinned snitch if he wants to, because 90% ought to be skinned when they try to beat the game. Ordinarily those fellows are so tight that you couldn't get a quarter out of them for Red Cross or anything else, and yet they come up there and snitch, and for my part I am glad to see him get it. So now since we cannot do it, let's do something here today men that will relieve us of that responsibility. It will put us on a higher plane, it will give us better and cleaner concessions and will not give us gray hairs. Let's do something. I'm for it! I think that every man here ought to be for it. And I want to say further, make it so strong that when we do that any fair officials that let them come in on their ground without their certificates should be barred from their state appropriations. I thank you, gentlemen!

The Chairman: Now, this is open for general discussion and I would like to hear from others. When you speak, please give your name and come forward because you can be heard so much better if you come up front. Is there any one else wants to talk on this topic? If not, I would suggest that a motion be made so that we can get it as a matter of record, that it be the sense or opinion of this meeting that the attorney general issue from his office a permit to concessioners as an evidence of their good qualification to enter upon our grounds. That is not just as it should be worded, but you can form the motion to suit yourself.

W. F. Weary, Sac City: I don't see how that is going to be of benefit. You take a concession man that wants to run in gambling, we have always to be a judge of that ourselves. I had a case of that kind myself last year. I told a concession man positively that he could not run a spindle, but when I walked down the midway later on I found that he had his spindle up, and I promptly tore it down and broke it up. If a man intends to take advantage of you, he'll take advantage of you whether he has a permit from the attorney general or whoever may issue these permits. He will take a permit for some certain game that qualified, and he will set up something entirely different. The fact that he has this permit doesn't signify that he has a legitimate game. We had our midway just crammed full, and outside of that one instance we had no trouble at all. Our concession money went around $500, and I am of the opinion that any permit we may have from state officials will not let out the individual man or any fair.

C. P. Harvey: I wish to state, gentlemen, that we had these things to contend with in our fair. Many of them! And sometimes, as the gentleman said here, if a man wants to do wrong you have plenty of laws for murder after murder is committed. He will come to you and say: "We have a nice little game here, there is no gambling about it, we only want a little space," and you say: "If that's what you've got we'll charge you so much." It is so done. The fact of the matter is he has got some little thing that he didn't tell the secretary about, and when it is discovered we inform our chief of police: "If you see any of this kind of work going on here on our grounds, we want you to remove the offender. First make him pay his concession and then remove him from the grounds with his outfit." We have had every year men of this kind to contend with, but we simply put them off the grounds and get through with them quick.

C. E. Cameron, Alta: It looks to me as though you are getting into pretty deep water on this proposition. Now, you know Mr. Havner's office is pretty strict and he'll probably require a certificate of character from every man that comes up for a certificate. You will probably find it hard to get a certificate of character from the average man that makes the county fairs. Suppose a man gets a certificate of character from Mr. Havner and he comes in here and says: "I have a certificate of character from Mr. Havner to do this," and he takes advantage of this certificate. I have been in the fair business for a long time. I have been connected with a county fair proposition for 16 years, and I know what these fellows will do, and tell you what kind of concession they have got. Now, you know a game of skill. I think Mr. Corey has outlined that in a circular he sent out a year ago—what constitutes skill and what constitutes gambling. The position I have always taken is this: When a man came up to me as secretary of the fair and I asked him: "Have you got anything in the way of a spindle wheel?" and he said he had, I'd say: "Nothing doing; nothing doing." If these things come on your ground and you find it out and you stop them, as Mr. Weary said, and run them off your grounds, you are not allowing any gambling on your grounds, therefore you will not be held responsible. If there is a contest of your right to state aid, they have in the first place got to prove that you allowed and sanctioned that apparatus to run. If you go to the attorney general on these things, I am afraid, boys, that you will curtail your concession department, because not one-third of them will obtain a license, because Havner will want a certificate of character from them, and they won't have it, and some of the things that you have which are legitimate, and the fellows that come from the outside will say: "I didn't know we had to have a certificate," and he is offering you $25 for 10-feet of space, and you see it is legitimate but you can't take him on. It seems to me that we ought to go pretty slow on this proposition, because I am afraid you will curtail your concession department and make it mandatory that a man secure a license from the attorney general of the state of Iowa, because we all know that Mr. Havner is mighty strict along these lines. My soul and heart are in the county fairs of the state of Iowa, and I want to do, and try to do, everything I can do to build them up, and you all know, gentlemen, that the success of all things is because nothing succeeds like success, and that success means when you have a balance on the right side of the ledger each year. If you have a man in the concession department that is not capable, and that is inclined to let them in, change concession men. Go around and see that the men live up to the concession that the contract calls for, and I think you will have no trouble with the concession men that are on your grounds.

Mr. Harvey: If these concessionaires unknown to the secretary come in here and ask for a concession, let him ask: "Where do you come from, Mr. Concessionaire?" "I live down here at Boone." "Are you acquainted down there?" "Yes, yes, I was down there at the fair." "Who do you know down at Boone," and he says he knows so-and-so, and you ask: "Will he give you a recommendation?" and he says: "Yes, I think so." Leave it open so that you can catch those fellows if you want to. We all have to work for all we get out of these fairs, you all know that. You put in a good chief of police on your ground and you will have none of that business on hand. I had the distinction and honor of serving as chief of police on our fair grounds for ten years, and we had nothing but a pair of shoes and a bridle stolen on the ground during that entire time. I feel a little bit proud of that, and our president took the honor and said he hoped it would continue that way. Take these concessionaires when they come in and say to them: "Understand, if you violate any law here, Mr. Concessionaire, you will get off the ground," and you will not have very much trouble. Sometimes they will probably deceive you anyway, but if they do that you show the public, you show the state, you show the nation, that you will not permit anything of that kind on the grounds, and if you are using all due effort to protect the people from these things you cannot be criticized.

There are several things in connection with this that I want to say to you, and that is sometimes you get a concession to sell this or that, and they will violate the law a little bit—they will short-change one man and overcharge the next, and you want to put your very best man over there and say: "No more of this overcharging," and you will have no more of that.

Mr. Young: Just one word in answer to Mr. Cameron here. I think that the answer to the question would be that this is the acceptable time and proper time to try this out, if the thing is good, because Mr. Havner has only twelve months time to do it before someone else comes in, and from all indications from the attorney general's office point that next year would be the good time for the concession fellow to get by. It wouldn't be so hard on the concessionaires with reference to the general moral character and reputation, and for that reason I think it would be a good time to try it, and I think the answer to the question is it would be a good time to try it, and I am in favor of trying it for one year anyhow.

The Secretary: It is entirely optional what attitude you take with regard to this, but there has been a lot of discussion about it. The matter of the attorney general, as I see it, in taking the initiative of placing a ban on these people and making it compulsory on their part to get a permit, is taken from this standpoint: inasmuch as he has those people out on the road anyway, they might just as well go into a fair ground and instead of throwing out this man just because he doesn't comply with this man's individual opinion at that particular place, he can look up this man's permit and see under what basis he was granted the permit, and then he cannot, as they say, snitch on the fair to Mr. Havner. But if this man is running a legitimate game according to his agreement with Mr. Havner, it eliminates that feature and he can run all over the state of Iowa so long as he runs with that contract. This year I met with several cases where the concessions were permitted to run in one place on one man's opinion, and go over a short distance from there and they were stopped by another man's opinion. It is due to the concessioner. They aren't all bad fellows, and they are out after the money just like everybody else, and I hope they make a lot of it. A lot of fairs aren't running on a Sunday school basis but are willing to run on the verge of a gambling basis. It takes only one man to make you all kinds of trouble, but if you have a man that has a permit and make him live up to it, then nobody can run him off the grounds.

The Chairman: Unless there is further discussion we will go to the next topic.

Mr. Leytze: I said before that in Sioux City we didn't allow any games of chance on the grounds. I agree thoroughly with Mr. Cameron. I believe that the fact that there is or is not gambling on the ground comes back to the individual secretary. I think you are putting a lot of trouble in your own way if you do this.

George E. Bliss, Corning: I believe that we would lose one-third of our concessions if we adhered to this rule, because there are so many that wouldn't go out as concessioners; they wouldn't bother to take out a license. It is easy enough to get rid of them, to put them out if they don't live up to the rules. We never had any trouble in Adams county. If they operate any games or anything that is out of order, we just put them right out.

Mr. Cameron: There is just one more thought that I want to leave you. As Mr. Lauer said, if a man had a card from Havner he couldn't be put off the ground, and if a man came from another state and he didn't have a card and he had a legitimate game you couldn't take him on.

Motion by Mr. Simmermaker, seconded, and unanimously adopted, that this matter be laid on the table.

The Chairman: Last year some of the fairs started a pig club contest, and among those was the Cedar Valley fair at Cedar Falls. I know you are all interested in this, and I would like to have Mr. Bailey give us briefly his success in connection with the pig club. If Mr. Bailey will do that, we will appreciate it very much. Mr. Bailey.

J. S. Bailey, Cedar Falls: This takes me by surprise, and I don't know just where to begin. I can only commence and outline what we did in the matter. The way this thing came up in the first place was with our county superintendent. One night on the street car he came to me and said, "Bailey, don't you think we could organize a pig club?" He then outlined about what he wanted to do. In a few words it is this: We borrowed the money—the fair association did—and we put up a contest for the boys in each township and put out one of these gilts in each township in the county, which is eighteen. Our plan was, after the boy had exhibited his pigs (sow and litter) at the fair, we were to take back two gilts or two pigs from the litter, and in one or two instances we had to take more pigs, which we disposed of. We took these gilts, and in another contest which took place during the fair we placed them out in the townships again. At the present time we have about 40 gilts in the county. The way we came about to have more than this is we started out with a red and black hog, Poland Chinas and the Durocs, and we found we had two or three boys that were deserving and they wanted the Chester Whites, so we purchased Chester Whites and placed those out, and that gave us a surplus, and that made three, and we put them in one or two townships. The pig club has met with wonderful success. The boys are very enthusiastic about it, and we had them in to the fair—and the fathers and mothers were there—we arranged with the county Y. M. C. A. secretary to take charge of the boys during the fair, we fixed them up with sleeping quarters and he took charge of them. The boys stayed on the grounds with the Y. M. C. A. secretary and they enjoyed the fair immensely. I look forward to its being one of the biggest things we have at our fair.

The Chairman: I don't believe you stated how you distributed them.

Mr. Bailey: A contest was made by talking with the county agent and the county superintendent of schools. They went to the different townships. For instance, they went to a certain group of townships in one day, they got the boys in each township to enter the contest, and the subject of the contest was the best method of feeding a hog and taking care of hogs intelligently, and the boys receiving the highest marks got the gilt, of course. I think there was as high as nineteen or twenty boys that contested the first time. At the fair the second time I don't remember just how many came in. That contest was held during the week of the fair, and the judging was done during that week also, but I don't remember the exact number that were in that contest.

Mr. Williams: Did you furnish them score cards?

Mr. Bailey: Yes, along the same lines. The superintendent and the county agent arranged for the score card for them to work out.

Q. How many months did you give them to work on it?

A. What do you mean?

Q. How long a term did you give them to take care of this pig?

A. Last year we put them out in the latter part of March, and this year we delivered them at the fair.

Q. What did it cost you, do you figure?

A. They cost us about $2,000. They were all pure-bred gilts, and we spent just about $2,000, including the insurance on the first 18.

Mr. Harvey: That all came back at the end of the first year, with a profit?

Mr. Bailey: Yes, and more than that, and we turned them right back to the boys again, and we put out the 40 head again.

The Chairman: Here is a mighty good thing. I happened to be at the Cedar Valley Fair this fall and I saw the exhibit as a result of the pig contest. They had a great big tent filled up with sows and pigs as a result of the 18 gilts that went out. You see the point? The fair got back two head in place of one. They have doubled their number instead, and next year it will be four, and at the same time the fair association is not losing money—they are getting back two dollars for one.

Mr. Bailey: I might say, if you figure this thing out on the basis of seven years, and counting that you disposed of the gilts and hogs that you have at the end of the seventh year, I have figured them at $30 a head, it will amount to $57,000 that the fair association gets from the hog contest.

J. A. Benson, Sheldon: I have come in contact with these pig clubs in conducting sales in several places, and there are some things especially interesting in connection with that. The American Poland China Record Association is making a great deal of money from its increased business, and they are especially anxious to aid these pig clubs, and therefore to encourage the formation of them will give $50 in money to each club that will give ten entries of a sow and litter, and they offer prizes as high as $35 for the top litter. If there are more than ten litters, each one will get at least $5. There are a good many county fairs that don't offer very much to the producer of pigs. I know, because I have been an exhibitor of pigs since I was a little boy. It might be interesting to you men of the county fairs to know that you can have $50 from the Poland China Record.

Voice: What is their address?

Mr. Benson: American Poland China Record Association, Chicago, Illinois; W. M. McFadden, secretary. It will be necessary for your fair association to communicate with them and have their approval before you advertise your money premium, but they have that open to all of the fairs, and last year they spent something like $2,400. Just about the same thing is offered by the National Duroc Jersey Association. Their headquarters is at Peoria, Illinois. I have known of a great many fairs that would have put this into their attractions if they had known of it or thought of it. My own fair didn't, and we came in a little late. It is necessary to start this thing early in the year to get all of your arrangements made, and that fits into your pig club very nicely. One county in South Dakota bought their pigs, paid notes for the sows, paid all of the feed at going prices, and came back in the fall at a sale and had a net gain of $115 per sow—some more and some less, but that pig club feature is something that helps the fair.

Mr. Bailey: In connection with the prizes offered these boys, after we got it nicely started, one of our manufacturers came to me and said, "Bailey, I'll offer as a first prize one of our feed grinders —a $65 feed grinder as first prize," and that gave me a thought and we got a prize for every one of the boys from our manufacturers and dealers along that line. Such things as hay, a ton of shorts, and things of that sort, and then I went to the bank and they said, "We'll give a five-dollar gold piece to every boy in the contest, so the banker came out there when we delivered the prizes and gave the five-dollar gold pieces. I might say also that the boy that won first prize sold his sow for $200 and three or four of his gilts at $80 apiece. I think he cleaned up something more than $400, besides turning back the gilts to the fair.

The Chairman: It is five o'clock, so we'll have to carry out our program. We will have to start on the election of officers. These recommendations I think should be properly referred to the resolutions committee to handle, and it will facilitate matters here considerably. If someone will make a motion to change the name of the association, and the matter of disposing of this state license perhaps should be referred to the resolution committee.

Motion by Mr. Bailey, seconded by Mr. Bacon, that the matters referred to be considered by the resolutions committee. Unanimously adopted.

The Chairman: Now we will proceed to the election of officers. It has been customary to elect our officers by ballot. The first office is that of president. I am going to ask the vice president to take the chair for a moment and receive the nominations.

C. P. Harvey: Mr. Chairman, if I am not out of order, I will ask that the rules be suspended and that the present officer be re-elected by acclamation.

The Vice President: You have heard the motion, gentlemen.

Mr. Harvey: I move you that the secretary of the association be instructed to cast the ballot of this association for the present president.

The Vice President: You have heard the motion, gentlemen. All those in favor of the secretary casting the ballot for Mr. Stanberry for president for the ensuing year, signify by saying aye. Motion unanimously adopted. Secretary duly casts the ballot of the association as directed.

The Chairman: I thank you, gentlemen. However, it wasn't my purpose to become your president for another term. There is a lot of good that can be done this year. We are in better position at the present time than we have ever been before. We have been seriously handicapped for years past and it has been awfully hard to accomplish what we should have accomplished. During the past year Mr. Lauer and myself and other officers, Mr. Gatch and Mr. Stewart, have made trips to Des Moines on matters of legislation and have paid our own expenses, and were glad to do it. Now, after having received the increased aid, it has made it possible for us to get more money in dues. Our dues now will be sufficient, I think, to let us do and accomplish a good many things we haven't been able to accomplish in past years. There are many things we want to go into that will be of benefit to the fairs and secretaries of the state. And right now I want to say this, that any time that any problem comes up that you want information on, or want help on, you want to remember that is what the state association is for. We have a secretary just for that purpose, and you don't want to fail to call on him for anything that you want to know along the line of information, or anything else. We are going to have a rearrangement of plans, and a different means in the future of informing you on topics that you can readily get by making the request for it.

We will proceed with the election of a vice president.

J. P. Mullen: I place in nomination Mr. Andrew Stewart, of Rockwell City, to succeed himself, and move that the rules be suspended and the secretary instructed to cast the ballot of the association for Mr. Stewart.

There being no further nominations, the motion and nomination were unanimously adopted and the secretary thereupon cast the ballot of the association for Mr. Stewart to succeed himself as vice president.

The Chairman: The next is the election of a treasurer to succeed Mr. Gatch.

J. S. Bailey: I move the nomination of Mr. F. A. Gatch to succeed himself; that the rules be suspended, and the secretary directed to cast the ballot of the association for Mr. Gatch to succeed himself.

There being no further nominations, the motion and nomination were unanimously adopted, and the secretary thereupon cast the ballot of the association for Mr. Gatch to succeed himself as treasurer.

The Secretary: I don't know what your intentions are. I at this time wish you would consider someone else as secretary of the association. I declined last year and I didn't get very far with it, but I really wish you would elect someone else. I don't know what your intentions are at all, and don't want to appear conceited, but after the action taken with reference to the three preceding officers I feel justified in drawing conclusions. I really think I am entitled to relief from the duties of secretary. This is my fifth year and I have worked hard, and tried to get results. Sometimes it seemed hard and I felt discouraged, but still there were features about it that made it pleasant. I did all I possibly could to improve conditions while I had the job, and now I am really asking that you get someone else for the office of secretary.

J. I. Overholt: I place in nomination the name of M. E. Bacon, and move that the rules be suspended and the secretary instructed to cast the ballot of the association for Mr. Bacon for secretary.

Mr. Bacon: I cannot be a candidate because I'll be secretary of a new fair being organized and I will have all my time taken up in that, and I won't have time to take care of this work.

There being no further nominations, the nomination and motion were unanimously adopted, and the secretary thereupon cast the ballot of the association for Mr. M. E. Bacon as secretary.

The Chairman: I want to suggest to the resolutions committee that they shouldn't forget what our good friend, Lauer, has done for us during the last five years.

Mr. Bacon: There is something that ought to be brought up before we proceed to the election of the rest of the officers. I think there should be a motion put at this time that it is the sense of this meeting that we express a vote of thanks to the officers of this association for their faithful work during the past year, and also to the legislative committee in their efforts in increasing our state aid from $800 to a limit of $1,500; and I will put that as a motion.

Motion unanimously adopted.

The Chairman: The next matter is the election of district managers. That matter was up here for discussion and we didn't even get time to consider it. The discussion was entitled, "Shall we decrease the size of our districts," necessitating more managers, or do we want to leave our territories as they have been.

Mr. Weary: I would like to ask Mr. Lauer whether it is necessary to rearrange the districts?

The Secretary: In the past it has been quite difficult for a district manager to reach the farthermost points in his district. For instance, Mr. Shipman, particularly, is 100 miles from some of his fairs, and he has tried to arrange matters by correspondence. At the time I suggested the decrease of the size of the districts I had in mind the almost impossibility of some of the managers to reach their fairs personally. That is a matter that will have to be considered by each manager if the district stands as it is now.

J. A. Benson: I move you that Secretary Lauer be chairman of a committee of three, the others to be selected by the chairman, to suggest redistricting and name managers for those districts, and report to this convention when it comes in session again.

The Chairman: That is a year, and in the meantime they should be authorized to name the managers, if none are elected.

W. R. Scholfield: With the consent of the mover, I move an amendment to the motion, that Mr. Lauer and a committee of three make findings and present them to the executive committee, and that their findings shall prevail.

Mr. Benson: I accept the amendment.

Mr. Overholt: I second the amendment.

Motion put and unanimously adopted.

The Chairman: I will name that committee later, if you will give me a little time. That, then, will eliminate the election of these officers for the time being. It has been suggested that there be a little change in the arrangement of our dues. Our dues have been based upon 1 per cent of the state aid. I think there should be a change in this. There is no objection to the 1 per cent, as I understand it, only some fairs' dues do not amount to very much, and they get pretty good benefits, and it has been suggested that their minimum be placed at $10. This is only a suggestion, and it is up to you for disposition. This suggestion has been handed to me to bring before you. Now, this means that the payment of dues will entitle you to your annual membership and you will be issued on payment of these dues a certificate of membership for such use as you wish to make of it.

J. I. Overholt: Being the smallest fair in the association, I make the motion that $10 be the minimum membership fee.

E. W. Williams: Second the motion.

Moved, seconded, and unanimously adopted that $10 be hereafter the minimum fee for membership in the association.

The Chairman: We have promised Mr. Baker, a representative of the United States Chamber of Commerce, some of our time. We will give Mr. Baker a few minutes of our time at this time. * * * I have been advised that Mr. Lieber, on the editorial staff of The Nation's Business, will make the address.

Mr. Lieber, United States Chamber of Commerce: It is quite a privilege and opportunity to have a few minutes of your time to speak to you on the subject which is an all-important subject of the day and hour, and that is the question of bringing business back to normal conditions. The Chamber of Commerce of the United States of America, while it does not hold itself responsible in any degree for the conditions which at present are affecting business adversely, yet it does hold itself responsible for putting forth every possible effort to bring business back to normal conditions by solving those problems which are affecting business adversely.

It might be well to state, for I find that some men in every organization aren't as fully informed as to what the scope of the national chamber is. The National Chamber of Commerce has only been in existence about seven years. However, it embraces and represents all of the business interests, business firms, business associations within the bounds of the United States. I am not quite sure, however, that your association, Mr. President, is a member of the National Chamber. Are you, or not?

The Chairman: No, sir, we are not.

Mr. Lieber: If you will take a gentle hint, I think you should be; but so far as I know nearly every association of every kind of business is a member of the national chamber. The national chamber, as I said before, represents about 700,000 business interests throughout the country, and the efficiency with which it thus represents these interests may be indicated in a few words by what the different departments of the national chamber has accomplished since its organization. When the chamber was organized our foreign trade was almost nil as to the balance of trade in our favor, but since the national chamber has been organized and is using its influence for the building up of our foreign trade the balance of trade at the present time runs up to two or three billion dollars a year. It is true that some of this is due to war conditions, but nevertheless the trade that is now established is so firmly established that it is highly probable that our balance of trade will go on and increase rather than decrease.

The industrial production department of the national chamber has been very instrumental in bringing about these conditions. When the United States declared its purpose to participate in the great war, it fell upon the industrial department of the national chamber to furnish the government with the material to back it up and enable it to make its work successful. It was the industrial department of the national chamber which supplied the government with the material to clothe our men, and with the men to equip our army and navy in such abundance that we were able to close the war six months before it was anticipated that we would be able to do so.

So this is but a hint, as I haven't time and you haven't time to listen to a discourse upon all of the work of the national chamber; but the one work that the chamber has in mind and in hand at the present time, gentlemen, is the bringing of business conditions at home back to normal that our business interests and enterprises of every kind may be able to proceed in its work of manufacturing and of dispensing products of the manufacturer to the people of the world. Therefore, they have assigned to the editorial department of the chamber the work of propaganda, a propaganda of spreading for them business information, business intelligence, such as is necessary to inform the business man as to what the conditions are prevailing throughout the country at this time, and as to what is necessary to be done in order that business may be stabilized. You are certainly aware that there is a disposition at the present time toward radicalism—not mere radicalism which is inoffensive, but a radicalism which is threatening to the business institutions of our country. I am enjoined to be very conservative in what I say along these lines, because we do not wish to store up or make any impression with reference to the overturning of things in such a way as to entirely destroy our institutions, and yet, friends, it is possible. Therefore, it is necessary to thwart any tendency of this kind, and it remains for the wise, sound, stable business men of this country to get together and to take such a stand that it will be impossible for such a turn of events to be brought about. The chamber of commerce cannot use radical methods; the only instrument that it has in hand for stabilizing business is the information which it is able to disseminate through its natural channels to the business men of the country. It sends out its bulletins from week to week of different character, a study of the procedure of congress, a study of the markets, and all of that information, but that information is not such as is necessary to stabilize business. What is necessary now, gentlement, is to quiet the minds of men so that they may not be disturbed in their thought, and the only way to do that is to educate the public as to what the conditions are and what is necessary to be done by the business men in order to do this. Therefore, the national chamber of commerce has proposed to put into the hands of the business men of this country the Nation's Business, which is the monthly publication and journal of the national chamber. Prior to a few months ago it was not the policy of the national chamber to put the Nation's Business into the hands of the general public. When the national chamber was organized the publications were designed and allowed to go only into the hands of the national members, but it was found that the Nation's Business was so effective, proved so useful in imparting to men business intelligence and in creating right ideas along business procedure that it was requested, upon the part of the members of the National Chamber, that the policy be changed and that it would allow the Nation's Business to go into the hands of every business man that he may be duly informed on all matters of business conditions and all business opportunity and all business policy, and also that he may be able to form public opinion along with the members of the national chamber. Therefore, it is the policy at the present time to place in the hands of every business man who will allow them to do so the reading of the Nation's Business. I don't know what more I can say other than this. The national chamber would like to be able to have every man read this journal without expense to him, but it would be impracticable for you as business men to expect that the national chamber would send the publication to every man without expense, but they have figured out what the expense will be and that is merely the expense of printing and of mailing. It is not a publication for profit, it is a publication for service, in order to serve the business men of the nation, in order that they may be efficient in every line of business activity. Therefore, they are requesting that during the period of two years, and they figure it will take two years to educate the public sufficiently to bring business back to normal conditions, and they are requesting that the business men throughout the country shall allow themselves to be placed on the mailing list of the Nation's Business at the nominal sum of $5.00, covering the two-year period.

There is nothing more that I can say than simply to ask that you will allow yourselves to be placed on the mailing list and that you will give your name to Mr. Baker, who is the business manager of this district for this particular purpose.

The Chairman: I will name on the committee for redistricting Mr. J. Q. Lauer as chairman, Mr. W. R. Scholfield and Mr. Roy T. Rowland.

I want to call your attention to the meeting of the State Board of Agriculture at the state house tomorrow morning at 9:30 o'clock. We ought to be there promptly at that time.

Remember the banquet down in the main dining room of the hotel this evening at 6:30, and also remember to get your tickets.

There should be appointed an entertainment committee for the ensuing year of three members.

Motion by Benson, seconded by Bailey, that the chairman appoint such committee. Unanimously adopted.

The Chairman: We will now adjourn until the banquet hour.

TUESDAY, DECEMBER 9, 1919, 6:30 P. M.

Banquet.

The Chairman: I would like to hear at this time the report of the Resolutions committee.

REPORT OF THE RESOLUTIONS COMMITTEE.

Your Committee on Resolutions beg to report the following:

RESOLVED, that this convention as a body express their gratitude to the members of the 38th General Assembly of Iowa for their courteous treatment of representatives of the Association and their loyal support in the passage of the bill for increased State Aid to County and District Fairs, known as the Santee Bill.

RESOLVED, that the name of the Association be changed from the Iowa Association of County and District Fair Managers to the Iowa Fair Managers' Association.

RESOLVED, that the President of the Association appoint a Committee of three to confer with the proper state officials in regard to licensing concessioners, operating games and shows at all county and district fairs within the state.

RESOLVED, that this Association most heartily commend and congratulate the officials of the Iowa State Fair in conducting an exposition which in magnitude and educational value is in keeping with the reputation of the greatest agricultural state in the Union.

RESOLVED, that this convention extend to the officers of our Association a vote of thanks for their untiring efforts in conducting the affairs of the Association, and making the arrangements for this meeting.

SIGNED,
Roy Wilkinson
R. E. Bucknell
E. S. Estel
Members of the Committee.

The Chairman: What will you have done with these resolutions?

Motion by Mr. Harvey, seconded by Mr. Bailey, and unanimously adopted, that the report of the Resolutions Committee be accepted and the committee discharged.

The Chairman: Gentlemen, we are going to start our big show. If you will allow me to say so, we will start the big show about 8:30. In the meantime we are going to bring out the little ones, and I first want to introduce to you, in the absence of Mr. Tom Fairweather, our good Governor Harding, who will entertain you for a few minutes.

HON. W. L. HARDING, GOVERNOR OF IOWA.

Mr. President and Gentlemen:

The program committee said that if I would come they would promise the members of this association that they would not be inflicted with me. Now they have broken their word with you. It would be impossible for me to fill the place usually occupied by the mayor of Des Moines, because most of him is below the belt. I didn't exhibit last year. The fact of the matter is that the competition is getting so keen at the county fairs that a grade won't get by any more. I have enjoyed in days gone by my visits at the county fairs, and the state fair and the district fairs, and I am sure that while I never got a blue ribbon, yet I had admirers as I stood in front of the grand stand.

I notice this audience tonight is larger than any I have seen assembled for like occasion during the past ten years. It speaks well for the organizations which you gentlemen represent. I just noticed in the resolutions that were read that they referred to Iowa and then said it was the best state in the Union. Well, if there was anybody conducting a fair in Iowa that didn't believe that, it ought to rain a whole week when he was having a fair. Of course it's the best state in the Union. I was down in Kansas not long ago and they were trying to brag about Kansas, and I told them that it wasn't necessary up here in Iowa to brag about our state, that it spoke for itself, but that we usually had a touch of Kansas every summer. We have many, many states in this Union of states, and each one has something of which it can be proud, and Iowa can enter almost any field of competition with any state of the Union and get a good marking, at least. We have made wonderful progress in agriculture in days gone by. I am satisfied in my own mind that we have only started, and it is organizations like the fair organizations of the counties and districts and states that are leading the way. I presume once in a while you get tired, and after you have worked all year and gotten a good fair together, and then it rains and the crowd doesn't come as it ought to, you say, "Well, is it worth while?" Is it worth while; if life is worth while it is worth while, for there must be those always who are willing to stand out in the forefront and lead. Land at $500 an acre, six per cent on that, somebody has got to be leading if you pay interest on the investment. We are going to pay interest on the investment in Iowa, there isn't any question about that, but we are not going to be able to do it in the old-fashioned way. It needs the spirit, the progressive spirit that is displayed by the men who have the courage, and it takes real courage to lead a county fair; but it is comparatively easy for Corey and these men who are associated with the state fair to get by. But when you just settle down in one lone county, and there isn't anybody willing to put up a quarter to back the thing, hardly, if you then go ahead and make a fair that is a success, they may never erect any monument for you, but I want to say to you that you are building a monument for yourself and for the county that is really worth while.

I wasn't on the program—Mr. Files from Fort Dodge has a speech all wrapped up in his system, and I was wondering, Ray, when the ladies were dancing up and down the aisle here whether we couldn't pull off our joint debate. The last time I had the pleasure of meeting your speaker of the evening, we were up at Boone and we were telling the ladies, or trying to—and he succeeded in convincing two or three at least that they ought to join, when they had an opportunity to join, the democratic party, and I want to say that a fellow that can put that over is some guy. And I don't wonder that they make a fair pay at Fort Dodge when it rains all week, because when a fellow can get the women that way they can do anything.

It is a pleasure to be here and dine with you and see you all so prosperous. Ten years ago when these fellows got together there wasn't a fellow that wasn't thinner than a stove-poker. You can always tell a prosperous man because he is fat. He either has money or good health, and both are prosperity.

Now, it is a pleasure to be here and to see that you are gaining ground, and I want to encourage you to keep whacking at the legislature for help, and if they don't give it to you make them stay at home, and you don't hurt yourselves or the state any if you do keep quite a few of them home, so there is no harm done. But I know that in this December meeting when you get together and talk over your troubles and your victories (and most of it is victory now) it gives you courage for next year, and that being election year you will have a large number of scrubs at the show, but they won't interfere with the real bulls that will be there.

The Chairman: All good things, gentlemen, aren't found in Des Moines—we have a few, I think, located in other parts of the state. One at our board is from Webster county—Fort Dodge. Mr. Files and I both come from Fort Dodge. I take pleasure in introducing to you Mr. J. R. Files, of Fort Dodge.

J. R. Files, Fort Dodge, Iowa: Mr. Toastmaster and gentlemen—When I was asked by your officers to speak here tonight, they wanted to know what I was going to talk about. I had a great deal of misgiving in announcing any subject for the occasion, because I always feel better when I get through if I can look everybody in the face and none can accuse me of not having stuck to my text, and for want of something better to say, I told your Mr. Lauer that I would talk about Robinson Crusoe. It seems that he took me seriously and advertised me for that subject. Mark Twain, when he was in his heyday, was giving Chautauqua lectures throughout the country, and he had a half dozen different subjects that he submitted to the different Chautauqua managements of which he gave them their choice—but he had only one lecture. One time, out of a spirit of deviltry, he added a seventh title to the list, and called it "Onions," and one of the managements to which the list was submitted wanted to hear his lecture on "Onions." He didn't know quite what to do, but he went through with it anyway, and he started out something like this: "Ladies and gentlemen, my subject tonight is 'Onions.' It is a very strong subject and you will please pardon me if I don't refer to it again during the course of my lecture."

There was an Irishman that had been attending Billy Sunday's revival meetings and he became a very enthusiastic convert and he became possessed with the idea that he was called to preach the gospel. So his friends, before he was turned loose on an unsuspecting public, thought they would give him a try-out in a little country schoolhouse. And he started out about like this: "Brethren and Sistern, you will find my text this evening in the 1-eyed chapter of the 2-eyed John, being in substance as follows, to wit: 'And the devil went forth as a roaring lion seeking whom he might devour.' This text naturally divides itself into three separate and distinct parts. In the first place, where did he come from; in the second place, why did he come, and in the third place, what in the devil is he roaring about."

Now the subject, "Robinson Crusoe," is not without its significance. Robinson Crusoe stood for a type with which the world has been familiar since the beginning of recorded time. He played a lone hand. You know that the first murder committed, of which we have knowledge, was the murder of Abel, and a voice said, "Cain, where is thy brother?" and Cain answered that by asking another question, "Am I my brother's keeper?" and that question has been ringing down the ages ever since. You are your brother's keeper, and you cannot possibly avoid that responsibility. Bees live in swarms, buffaloes range in herds, but the jackal hunts and howls alone, and so did Robinson Crusoe. You know the old ditty:

> **Robinson Crusoe lived alone;**
> **No bills to pay, no friends to loan;**
> **He wore the same clothes all the while,**
> **A string of beads, a pleasant smile——**

And there you have it in a nutshell. Modern civilization demands its penalties, and you cannot find the simplicity of a Robinson Crusoe existence in the divine plan of modern civilization. Bills must be paid, friends must be loaned, and the progress of a forward-looking and forward-stepping humanity has never been characterized by a failure or refusal to change clothes whenever a change was needed. Iowa has changed her clothes a hundred times, and it is still changing its clothes whenever a need demands. My father came to the state of Iowa seventy-five years ago, and at that time caravans and prairie schooners were headed eastward, warning all comers that if they ever expected to get back to civilization they had better start, because nothing could exist in Iowa except mosquitoes and ague. Look at us today! During the decade of 1900-1910—and that is not so long ago—during that decade, every single state of the American union increased in population with one solitary exception, and that lonely exception was the state of Iowa. People have been trying to solve that puzzle ever since. The trouble is the people didn't realize the greatness of this state, and they don't fully realize it yet. You know, they heard about the wonderful wheat fields in Saskatchewan and Medicine Hat. They heard of the wonderful possibilities of the Panhandle, and they were lured by the vari-colored descriptive folders that showed plums grown in Washington seven times as big as they actually were, and away they went to the North Yakima valley. I am reminded by that situation of the mute farmer who called his hogs to feed by tapping on the fence with his cane. Finally the old man died, just when the hogs were in good flesh, and they fell into other hands. In spite of an abundance of feed, they grew poorer and poorer and no one could find out what the trouble was. They dipped them and doped them, but the hogs kept getting thinner. Finally the secret was discovered, they observed that those fool hogs were chasing themselves into razor-backs following the woodpeckers that were pecking on the posts around the pasture.

I have just been handed a note which says that the coal strike has been called off.

Do you know that is what the people of Iowa were doing during that time. They heard a rapping out in California and Washington and they heard a tapping in Texas and Canada, and they began to follow after strange gods, but most of them have been coming back to I-o-way wiser if poorer men. That was the situation here in the years 1900-1910, but now people are just beginning to realize that we have the greatest state of the Union, just as the governor said; they are beginning to realize it more now than they ever did before. Iowa is now going at topspeed—in fact, they are going at such a rapid rate of speed that they seldom take time to look back and see how far they are ahead. They are like the Irishman who had taken the wheel of a ship. For three weeks they had been tossed and tumbled by a storm, and at the first sign of calmer weather the captain called Pat to the wheel and he said there were two things he shouldn't forget: First, to head straight for the north star, and second, and on peril of his life, he warned him not to go to sleep. In about two hours the captain returned to find his man leaning against the wheel sound asleep and the ship headed toward the south and ruin. He kicked the Irishman and shook him out of his sleep and angrily demanded to know why he had gone to sleep and permitted the ship to be driven off of its course. He said, "Do you see the north star back here?" The dazed Irishman gradually collected his wits and said, "The north star? Hell, cap, give me another one, we passed that an hour ago!" Well, you know that while Iowa was continuously the first to go over the top in matters of war activities, it was an eye-opener to a great many good people. They didn't realize the kind of competition they were up against. And when you stop to think about it, why shouldn't Iowa have been the first state to go over the top? In fact, she would have had a mighty hard time explaining to posterity if she hadn't been first over the top. Why, the Iowa corn crop alone is worth more than a half billion dollars. But that doesn't mean much to us in these days of billions. We have been accustomed to look at a billion dollars as we do at a bushel of potatoes. How little conception we have as to what a billion dollars is. If you had a dollar for every minute that has elapsed since Christ was born, you would not have a billion dollars yet. A modern machine gun shoots more than 500 bullets per minute, but that machine gun could be kept continuously in operation day and night for three years, nine months and twenty-five days before you had shot a billion bullets. If you had a billion dollars and should employ a publisher to print the Bible, you could pay him $1,250.00 a word and still have $37,500,000.00 left. With a billion dollars you could employ one thousand men, pay them wages of five dollars a day, and keep them constantly employed for a period of 542 years. If you were to take a billion one-dollar bills and attach them end to end you would have a rope of money 118,500 miles long—it would reach nearly five times around the earth. So that the Iowa corn crop isn't to be sneezed at. Our corn crop is worth more than the annual gold output of America; it is worth more than the total wheat crop of the Dominion of Canada. Our egg crop alone is worth more than the total orange crop of the entire United States. We have twice as many hogs as Illinois, our next nearest competitor. We have 100 million dollars worth of live stock more than any other state of the Union. But we can go farther than that, and here is another superlative: The horse crop of Iowa—we exported more horses during the great war than any other state of the Union. France is the home of the Percheron, Scotland is the home of the Clydesdale, and England the home of the Shires, but Iowa has within her borders more Percherons than France, more Clydesdales than Scotland, more Shires than England, and more Belgian horses than the entire country of Belgium. The aggregate farm values of the state of Iowa is greater than the total farm values of the states of Maine, New Hampshire, Vermont, Connecticut, Rhode Island, Massachusetts, Delaware, New Jersey, West Virginia, Maryland, South Carolina, Florida, Alabama, New Mexico, Utah, Arizona, Nevada, Wyoming and Montana—nineteen states. Can you beat it? There was a fellow connected with the department of agriculture in Washington a few years ago that had heard so much of the great and wonderful resources of the state of Iowa that he secured permission of his chief to make a first-hand investigation of the state, and he compiled a lot of scientific estimates, and here are some of the things that he made estimates upon: He said that if all of the hogs in Iowa could have been turned loose in the Panama Canal zone they, with their reliable snouts, could have excavated the big ditch in forty-eight hours. He estimated that the mules in this state—and we don't ordinarily boast about our great mule-producnig capacity in Iowa—governor, perhaps that's because there aren't enough democrats in Iowa!!!

Governor Harding: At that, there are enough.

Mr. Files (continuing): If all the mules in Iowa could by some means be transformed into one great elongated mule, that animal could duck his head and kick the spots off of the moon. He estimated that the cows of Iowa produced enough milk in a single year that if it could be poured into the vacated bed of the Mississippi river it would float a fleet of battleships from Keokuk to New Orleans. If all of the cattle in Iowa could be amalgamated into one great conglomerated cow, that old bossy could stand with her feet on good American soil, browse upon the luscious grasses of the tropics, and at the same time with her tail be switching the icicles off of the north pole. It is a wonderful state that we live in!

Iowa has more automobiles per capita than any other state of the Union. She has more newspapers than any other state of the Union. She has more colleges than any other state. She has more secondary schools than any other state. She has a lower percentage of illiteracy than any other state. But there is another field in which she is making herself known. During the past ten years Iowa has been going forward more rapidly than any other state of the Union in the matter of manufacture. Do you know that at the present time, the largest broom factory in the United States is located in Iowa at Burlington? The largest sash and door factory is located at Dubuque; the greatest cream separator factory at Waterloo; the largest calendar factory at Red Oak; the largest plaster mill at Fort Dodge; the largest cereal mill in the United States is not at Battle Creek, but at Cedar Rapids, Iowa. The largest furniture factory is not at Grand Rapids, it is at Burlington. And so you can see that it is high time that we people of this state, and the people of the world were beginning to realize that here, after all, is the Garden of Eden. And it is not necessary for me to say that the fairs of the state of Iowa have been one of the most potent and one of the most effective mediums of education, that has brought Iowa to its present pre-eminence. Neither is it necessary for me to say that the greatness of the state of Iowa, and the success of the fair associations of Iowa have not been due to the application of Robinson Crusoe methods. Perhaps one of the best examples of the effectiveness of co-operation can be illustrated by a little animal that roams the plains of South America—it is called a burro. It goes about in herds. It has just one enemy to fear, and that is the wolf. When they are attacked they form a circle, with their heads together and their heels to the outside and proceed to kick off the enemy. And yet how frequently we have seen it in communities where just the opposite methods were adopted and people would get their heads to the outside and their heels together and proceed to kick the stuffing out of each other. Iowa is beginning to get away from that kind of method—it doesn't pay. A magnificent example of the power and effectiveness of co-operation may be seen in the fighting of the great world war. We saw there a nation that tried to play a lone hand and we saw what happened to it. We know today what would have happened to many another nation if they had attempted to adopt the same policy and play the lone hand. The United States for two years, being at heart a peace-loving people, was trying to keep out of the conflict because they didn't care for war. The United States would gladly have followed their traditional policy of isolation; they would have been more than willing to have kept out of that conflict if they had found any alternative, but the alternative couldn't be found. For two years this nation saw the sparks of the European conflagration flaming in our own skies. For two years we heard the echoes of that struggle knocking at our very doors; time and again the angry waves of war threatened to destroy our peace and security and yet for two years this nation hoped against hope that armed conflict might be avoided. And then this nation found that it was our war and had been our war from the beginning. They began to realize, as they didn't realize before, that if we didn't stand by the nations that stood most nearly for the things that we stood for, that sometime we would have a powerful enemy to fight, but we would have to fight that enemy alone. At the time this nation began co-operating with the other nations to eliminate Germany as a factor in world politics, the world was in a sorry state of affairs. At that moment, Germany was standing with her bloody boots upon the lacerated breast of Belgium, Serbia, Roumania and Poland. At that moment, Germany was standing with her foul fingers clutching at the bloody throat of prostrate Russia. Germany at that moment with bloodshot eyes was ready to lurch forth once more for the loot and the rape of France. That was the situation when America stepped in.

You sometimes hear the question asked as to who won the war. We may just as well ask the question, which of four quarts makes a gallon. The truth is that the war wasn't won, and possibly couldn't have been won, without co-operation. Had it not been that every nation to a greater or less extent swallowed its pride and on the 26th day of February, 1918, agreed to go in and fight under a unified command, the prospect would not have been reassuring. Look back and see who won the war! We know today of a conference held at the palace at Potsdam on July 5, 1914. At that conference were 500 junkers and war lords who deliberately planned the raid on civilization that subsequently came. At that conference Germany was attempting to play a lone hand. There was presented a large chart or map of Europe. It began with the Scandinavian peninsula and extended to Constantinople. Near it was another map, and it was a map of the new world. It had a "G" where San Francisco stands and an "A" where Washington stands, and across our fair land was written the word "Germania." One of those military junkers, we are told, made a speech in which he gave this slogan: "Three days to Brussels, three weeks to Paris, three months to London, and three years to Washington." And doesn't it almost give you the jim-jams tonight to sit here and reflect how closely they came to carrying out that nefarious prophecy? Because, if it hadn't been that that little army of Belgium, outnumbered twenty to one, immolated itself; if the little country of Belgium had not placed itself upon the sacrificial alter of humanity, they would have been in Brussels in three days. If they had crossed Belgium unopposed, they would have been at Paris in three weeks, because, after they had been held up at Liege for ten days, they came within a stone's throw of Paris at the end of the first month of the war. If France had failed during the first three weeks of the war and Paris had fallen, and the British ships had been swept from the channel, who doubts but they would have been in London in the period of three months? If in the first half year of the war the continent of Europe had fallen before Prussian power, it requires a mighty little imagination to see that the later chapters of the war would have been vastly different, and we would have had a powerful enemy to fight alone. And so we can go back and safely say that Belgium saved the war!

And what about England? When England sent her first 100,000 men to stand at the side of France, Germany referred to it as England's "contemptible little army," and yet one division of that "contemptible little army" held a front line sector when 70 per cent of its men had fallen. At a later occasion, with their backs against the wall, at terrible cost and for a period of six weeks, fifty-five British divisions held 105 German divisions at bay. Had it not been for the splendid work of the British fleet, it is a question of how much of a factor America could have been in the struggle. And so it can be said that England saved the war!

And what about France? The indomitable spirit of France can best be illustrated by the story that Charles Edward Russell tells about a French mother. Mr. Russell and Elihu Root were sent on a mission to Russia. They traveled through continental Europe and visited many battlefields. They were out on the battlefield of the Marne when Mr. Russell saw this woman of France. When the war began she was feeble and broken in health, and she mourned the fact that she had nothing to give to her country. But she had. She was the mother of four stalwart sons, the youngest being sixteen years of age, and those she gave freely. Those boys fought at the battle of the Marne. They fell mortally wounded and their bodies were placed in a row. Out upon that battlefield came the mother, she paused at the grave of her first-born child, she breathed a prayer and dropped a flower, and passed to the second, and then to the third, and finally she stood at the foot of the grave of her baby boy, that last great sacrifice that had been wrung from a mother's heart, and her emotions overpowered her and she fell prostrate upon that little mound of dirt and wept as though her heart would break. But that mother had the courage, that mother who had given everything, who, by all the standards that we know anything about, had nothing more for which to live, had the courage to lift her face through her tears and to raise her voice to high heaven and after all to thank her God that she still had her France. That was the spirit with which France fought. Look at the battle of Verdun! Verdun wasn't a battle, it was a war in itself! Four hundred thousand lives were sacrificed in the assault upon that stronghold. Inch by inch the gallant French gave way until Fort De Vaux was the key to the entire position. That pivotal point was taken and retaken seven times, and when the Germans were preparing for the final assault a young lieutenant found himself in command, every superior officer having fallen. He received a telegram from General Petain which read: "They shall not pass. Fort De Vaux must be held or Paris and the channel ports are lost." That young man felt the crushing responsibility that was resting upon him. He looked about upon the gaunt and famished faces of the living, three days without food or water. He looked upon the endless windrows of the dead, and he leaped upon an eminence and cried, "Arise, ye dead, and fight once more for France!" The dead, of course, didn't arise, but they did fight once more for France, because the spirit of their sacrifice so inspired the living that Fort De Vaux was held and Paris and the channel ports, and civilization itself, were saved. And so we can say that France saved the war!

But that was a war of a thousand miracles. Time and again the very fate of the world seemed to hang in the balance. The peak of the crisis came in the spring of 1918. That was the time when Marshal Haig gave that now famous statement: "We are fighting now with our backs against the wall." That is the time that Lloyd George exclaimed, "It has now become a race between America and time." That was the time when Paris and the channel ports were fairly rocking before the approaching tread of the conquering Hun. No; it wouldn't quite be fair to say that America won the war, and yet this is an eternal verity, had it not been for America that war was lost. Just at a time when the thinning ranks of our valiant allies faltered in Picardy and fell back at Kimmel Hill, America poured forth such a reservoir of power that four months from the day of the July drive in Chateau Thierry, Germany was crushed and beaten into helpless and hopeless submission. Who won the war? What boots it who won the war! Honor to whom honor is due. There is glory enough for us all. It was not the courage of any particular army nor the valor of any one navy; nor was it the strategy of any general or the wisdom of any statesman, but the winning of that war was a supreme triumph of right over wrong. During the period of the war, between the contending lines in far-away France, there was a narrow strip of land 400 miles in length, but exceedingly narrow, and they called it "no man's land." It was so narrow that the human eye could compass it, so narrow that the bullet of a rifle could cross it, and yet that narrow strip of land was the widest expanse that ever existed on this planet, because it was the dividing line between justice and injustice. We long have been taught to regard the Atlantic as a wide and pathless ocean, so wide that it takes the fastest vessels seven days and nights to cross it, and yet during the war that ocean became so narrow and its shores came so close together that hearts touched; because the men on one side and the men on the other side were fighting a common battle for honesty and righteousness and civilization, and for humanity. Such was the spirit of the war.

And yet with what spirit are we now approaching the problems bequeathed by the battlefield to the councils of peace? We have fought that war in vain! We betray our soldier dead! Unless we are willing to bend our energies for the purpose of helping to make a recurrence of that awful holocaust forever impossible. That was the most terrible of all wars! The human imagination cannot begin to conceive of its magnitude. More than thirteen millions of lives were lost. While the battle of the Argonne raged, fighting proceeded along a front of 200 miles; seventeen allied armies were fighting desperately engaged in mortal combat. Every one of those seventeen armies numbered more men than the combined strength of Lee and Meade at the battle of Gettysburg. Yet if there were to be another war, that war would pale into insignificance. Remember, my friends, there is no such thing as noncombatants in modern warfare. Remember, the goal of modern warfare is not defense, it is destruction. When Germany began her hellish gas attacks at Ypres, she made a tremendous blunder. If Germany had had the foresight to first develop that terrible agency and then equip her own men with the gas mask, so they could have followed their own gas attack, we are told that Germany could have annihilated the entire allied army within a period of ten days—before America ever got into the war. And yet it is true, four years ago we couldn't have believed such a thing, but it is true that in the closing months of that war gas was being developed in quantity, in the laboratories of our own land, that was called Lewisite that was 100 times more deadly than the original gas used by the Germans, and had the war continued another six months, it was expected that that gas would wither our enemies. What can be expected if there should be another war? We know something about aircraft. We know it is just in its infancy, and yet we know that during the period of the war it developed to such a remarkable degree that it was expected if there had been a campaign in 1919 that aircraft would have been the deciding and overwhelming factor of the war. There never has been, there never can be, an adequate defense to an attack from the air. Only a few months ago the war department revealed an invention in wireless control that had been developed and was almost ready for use when the armistice was signed. By means of that invention it is possible for an aviator 20,000 feet in the air, fifty miles from his objective, to launch a terrible death-dealing bomb and direct it into the heart of a great city with the most deadly and unerring accuracy. What may be expected from the air if there were to be another war. For the past fifty years the best brains of the world, scientists everywhere, have been fighting a winning battle against bacilli and its death power. No scientist ever attempted to cultivate the man-killing power of the disease germ, and yet were there to be another war with an unscrupulous enemy this field alone offers the most gruesome and most horrible possibilities. I tell you, my friends, this thing must stop! The armed dragon of Germany has been slain—never must another be permitted to arise in its stead. We must see that the occasion for the use of these destructive agencies must never come again. If these things are not stopped, there is only one alternative. America is too good! America is too great! America must be saved at any cost! And if we are not willing to co-operate with the best forces of the world to render forever impossible the recurrence of these destructive orgies, then America must arm; America must build for war; she must prepare for war—not a defensive war but she must prepare to kill and be killed with an intensity hitherto undreamed of. Isolation is no longer our protection! There isn't any such thing! We are just as much in the world's currents today as if there were no oceans, and for us to retire in the face of responsibility, simply means that we bury our heads in the sand. The battle of Chateau Thierry and the Argonne were meaningless if those battles have to be fought over again. We may go forward or we may go back, but we cannot temporize and we cannot stand still. But there is a brighter side to all of this! America is confronted today with the opportunity such as does not come to any nation in a hundred lifetimes. It is the opportunity to assume the moral leadership of the world and to render service to humanity. But with the opportunity there comes a responsibility. Is America going to meet that responsibility? During the period of the war the American soldier gave the most magnificent picture that the world has ever seen of a helpful, generous, and courageous American. Is it possible that America is now going to reverse the picture and show to the world an America that is selfish? That is hesitating? And that lacks the courage to meet its own manifest destiny? I cannot, I will not, believe it. I believe that yet, without bitterness, and in a spirit of good-will, a way can be found out of this situation. Tonight 50,000 lads are sleeping in far-away France. Never let it be said that their sacrifice was made in vain. By their sacrifice the world came to trust us. It looked to America to play square. Is it possible that we are going to draw the cloak of selfishness about us and say to a distracted world, "No, America is going to play safe"?

Do you know that the ocean has been crossed from the air? Ten years from now America will be no more isolated from Europe than if she were situated in the very heart of Europe. Remember that everything is drifting toward the co-operation of the peoples of the world. Remember that never again can war be considered private business. Remember that never again can America or any other nation complacently fold its hands, declare its neutrality, and say that war is only the business of the participants. The arteries of international intercourse have become too intricate for that sort of thing. We have seen that a single spark can set the whole structure of civilization aflame. Play safe with the world on fire? There is no safety anywhere in a disordered world! Do you know, my friends, what we once thought of as independence is almost a thing of the past? I suppose that Robinson Crusoe was the most independent man that ever lived, but thank God, the days of Robinson Crusoe have gone. Think of it, you got up this morning from between a couple of cotton sheets that were grown on a plantation in Mississippi and were manufactured in Connecticut, and they came to you. Your cover was a couple of woolen blankets that came from the sheep in Wyoming and Montana, were manufactured in New England, and came to you. Your shoes once adorned the back of a Texas steer and were manufactured in Massachusetts. You walked downstairs on treads of lumber which was milled in the forests of Oregon. You sat down at a breakfast table with a linen cover that grew in the flax fields of Canada. You ate grape fruit for breakfast that grew in Florida. You ate breakfast food that came from a farm in Nebraska and was manufactured at Battle Creek, Michigan. You drank tea that came from Japan or coffee that came from Brazil, out of a cup that came from China. You put in sugar that came from Cuba, with a spoon that was mined in Nevada, and every hour of the day and every hour of the year, whether you will it or not, you are helplessly and hopelessly dependent on somebody else. And so this may be applied on a larger scale, because autocracy abroad threatens democracy at home, and bolshevism anywhere is a direct menace to the stability of our own institutions.

You who are responsible for the success of a fair are never going to be able to measure the success of that fair by the height of the wall with which you surround your grounds. The success of that institution is going to be measured by what you give to the people that come into the gates in return for their money. The watchword and keynote of the world today is co-operation and service, and never again will any nation be able to measure its greatness by the size of its army or the strength of its navy. But the greatness of every nation must rest upon its ability and disposition to render service, service to humanity and to the world.

The Chairman: Now we have other speakers who will follow on the program interspersed with various kinds of entertainment.

(Several musical numbers were given at this time.)

The Chairman: As a diversion I would like to introduce Mr. A. L. Rule, of Mason City, who will speak to us at this time.

A. L. Rule, Mason City, Iowa: Mr. Toastmaster and gentlemen —The various speeches that have been made here tonight remind me of a story of two Hebrew brothers who were drafted into the service, and after they had been in a short time one of the brothers started to write home and he wrote: "My dear father and mother, I am so glad I came into the army, it is a wonderful job,—I have a fine place to sleep, nice warm blankets; I have a nice place to eat, and I have the very best of food to eat; I have nice clothing and I get my pay every thirty days. It is a wonderful job, I am so glad I came here. Your loving son, Abe. P. S.—Ike went to the guardhouse this morning for kicking." But, gentlemen, in a serious vein, as I sat here tonight your guest and enjoyed this repast, I looked over the faces at these tables and the thought occurred to me that it was no wonder that the fairs of Iowa are a remarkable success. When you men of business ability put your shoulder to the wheel and start into a public enterprise, such as the great fairs of the state of Iowa are, it is no wonder that they are successful. You are accomplishing a wonderful work! There is not enough, in my judgment, in this life of the attempt of men to organize to do good for their fellow man and to furnish him a diversion. Every form of entertainment which you develop which brings entertainment and relaxation, together with instruction, is doing a wonderful work for this country, and in connection with your work you are reaching out and bringing the farmer in touch with the people of the towns and the cities. You are bringing the farmers together and forming organizations which are going to redound not only to the benefit of the state of Iowa but to our country. We are living today in a time which, in my judgment, is far more serious than was any period during the war. We are living in a time when we are talking a league of nations—and I am not talking against it— we are living in a time when we are trying to assist the rest of the world, and yet while we are doing that thing, while I am trying to stand here and bring this thought to you, we are on the verge of an eruption that may mean the destruction of this country. We have fought the world's war, but we are far from having finished it. The slimy serpent that Germany sent into Russia, the Lenines and Trotskys, the serpent of bolshevism, has set its fangs in this country, and tonight while you and I are sitting here in this room, the government, the prominent men of this country are studying and working with might and main to thwart the work that Germany started on the other side and it has come over here. Do you realize, and have you ever stopped to think (and, mark you, in these remarks I do not charge it against American labor, but I do charge the foreign labor that has been brought into this country), and I say, while we are sitting here the thinking men, the men who are in touch with these affairs, realize and know that we have a red flag in this country that is trying to sink us into oblivion far worse than that which was threatened by Germany. It has been demonstrated by the government, and the evidence was obtained, that the steel strike was started and started for no other purpose than as part of a program to bring an open break in this country. The coal strike was to follow, and it came. We broke the steel strike, and we have broken the coal strike, and God knows that is the best news I have heard in days, when the note came that this strike was over: but we are going to root out this foreign labor that is making this agitation. America believes in a league of nations; America believes in assisting the rest of the world, but the first thing that we have got to do is to see that America is made safe for Americans. We have now in this country hundreds of thousands, aye, millions of foreigners who came into this country as immigrants who are making our best citizens, they have become assimilated, and have become just as loyal as you and I and just as good Americans, but, gentlemen, we have assimilated all we can assimilate for the present. Our doors have got to close, and make loyal Americans of all that we have in this country, and if he is not satisfied to be an American, and stay here and be a loyal citizen, let him go back to the other side either alive or in a box.

I haven't time to tell you the things I would like to tell you, but I throw out this word of warning without any desire on my part to alarm you or mar the brightness of this occasion, but, my friends, the conditions in this country are so serious that we have got to act and act immediately. The day for education has gone by. We have been talking for months about going out and educating our people and training them in American citizenship, but it is too late to do that, and I call upon you fair men, you who are in touch with the people in this country, you must counteract bolshevism or anarchism that has been circulated throughout the state of Iowa. Do you know that one of the patriotic orders of the state of Iowa during the last three months has accumulated several trucks full of anarchistic literature that was collected from farm houses of the state of Iowa. I saw only yesterday a program that was printed on a red sheet of paper by one of the labor organizations. The red paper that it was printed on was indicative of the red flag and nothing else. That program was to cause an uprising in this country, and I want to say to you, my friends, that it is coming within the next six months unless we act, act promptly, and act firmly and stamp out this form of bolshvism that has started in this country.

I thank you!

(Several vaudeville acts were given at this time.)

The Chairman: We will now hear a few words from another of our senators, Mr. Holdoegel, of Rockwell City.

P. C. Holdoegel, Rockwell City, Iowa: After having enjoyed the festivities of the evening so far, and after having had the experience this afternoon of being driven from an office at three o'clock because the fuel administration had sort of ordered the closed season for game for us fellows on the business preserve, I was reminded of a darky whose story was told by a man in the Y. M. C. A. service at Camp Dodge. Rastus came up from South Carolina and one day wandered into Y. M. C. A. headquarters to have a letter written, which the genial secretary proceeded to do, and this conversation followed:

"Massa dad, I want you to tell me why ever since I've been up here I'm getting three square meals a day. Am I going to get three square meals a day?"

"Yes."

"Look at these clothes, where am I going to get pay for those clothes?"

"Uncle Sam."

"And they told me, massa dad, if I stay here they'll pay me $30 a month."

"Yes, that's right, Rastus."

"Whose's going to give it to me?"

"Uncle Sam."

"If they're going to give me three squares, and they're going to keep me in nice clothes, and pay me $30 a month while I'm here, why didn't this war start long ago?"

And so as I sat here this evening listening to the music and partaking of this splendid banquet, I wondered why you didn't start these festivities long ago. It is a pleasure to be with you fair men tonight, because of the fact that you people, as largely as any element in the economic development of our state, have been responsible for the development of our agricultural business of the state to the point where Ray Files was describing the greatness of Iowa. The corn crop of Iowa brings more gold into Iowa than has ever been produced in all Alaska, and those are conditions very largely brought about by these very agricultural societies. Then when my friend, Senator Rule, was talking about the conditions as he sees them at this time, the thought came to me that the people of this nation are builded of a race brought through the turmoil of the old world—a distinctive race made from all the selected elements of the earth. I was under the impression that we had always arisen to the emergencies as they came, and I don't doubt that we have a condition upon us now that does demand the most careful thought and consideration, perhaps, that any industrial condition has ever presented to the American people. And yet I know that the American people, in their red blood, will arise to this emergency, and it is in your minds, it is in my mind, and it is in the mind of every household in the state of Iowa at the present time, "How shall we solve the present conditions?" and I don't believe the conditions here in Iowa are like the Israelite on the ship at sea when he was notified in the middle of the night that the ship was sinking, and he replied, "Vot do I care, it is not my ship." But our people are awake, and the American people will arise, they will continue to arise and they will handle the situation, but we must not be derelict in our duty, as Senator Rule said. As you go out into the country, as you carry on the great enterprises that you are all carrying on in your community, you cannot awaken too much enthusiasm in the hearts and minds of your people to get them interested in the promotion of agriculture. Get them to produce the finest stock, the best stock, that the world produces. You are producing it now in Iowa. The best corn, the best vegetables, and all of the best fruits that can be produced, and we are doing it now in certain fields in Iowa. A great problem, too, is quick production. Look at your county fairs, how you put your boys on the baby beef contests, teaching them to produce 500 pounds of beef in half the time that it was formerly produced. Haven't you caused two blades of grass to grow where one grew before? Not only that, individually I know that you are not working for Iowa in the same spirit of the Missourian who was raising hogs and feeding them acorns and letting them run around in the timber. An Iowa farmer was driving by in his automobile and he saw these hogs and he said:

"You have a lot of hogs here, brother. What do you feed them?"

"I feed them acorns and pig nuts, and they grow pretty good."

"They don't seem to be very fat, do they?"

"Oh no, they don't get very fat, but they grow."

"How long does it take you to raise a hog down here?"

"Sometimes we let them grow for three or four years."

"Why don't you feed them corn?"

"We don't raise corn."

"Why don't you raise corn?"

"What's the use raising corn, let the pigs feed themselves."

"Don't you know, if you raised corn and fed your pigs properly, you could get a mature hog in a year?"

"What's the advantage of that? What's the use of that?"

"Why, you save time."

"Oh," he said, "what's time to a hog."

You have overcome that spirit of lethargy in the state of Iowa through these organizations; you have realized that the betterment of conditions and progress in agricultural pursuits shall be the results of your combined efforts, and when you count the results of your activities along the line of development you know that your efforts may be added to the general result rather than subtracted from that general result. I don't know of any other enterprise in the state of Iowa more productive than this fair organization, and when the farmers are organized throughout the state how much more they will be interested in the advancement of agriculture and the finest products of the soil as they are brought to the fair. I want to congratulate you men not only on the great work you are doing throughout the state, but upon the entertainment that you have put on here for yourselves and your guests, of which I have had the pleasure of being one.

I thank you.

(Several further vaudeville acts were shown at this time.)

The Chairman: We would like to hear from Mr. Curtin about the feature of added money for racing.

E. J. Curtin, Decorah, Iowa: I don't think any talk on added money is needed here. I was looking over the statistics of the Iowa fairs for the past year and found that out of ninety-three fairs, fifty-two gave racing under the added-money plan, so with that statement I don't know that anything further need be said about it here.

About a year ago the matter of racing became so disturbed that the men who gave the races thought they should have more money, and South Dakota tried it out with great success. The average county fair has been giving $300 purses. I say the average, because some give a little bit more and some a little bit less. And they charged 5 per cent to enter and 5 per cent to money winners. If they got six entries, it would mean about $150. Now, the average program was six races at a cost of $150 per race, which would aggregate $900. The number of horses for the six races was usually about thirty, so that the thirty horses received from the fair association about $30 apiece. Now, that is utterly inadequate, and if you want to continue this sport you will have to give them more than that, for the driver, the caretaker, and the horse cannot live on $30. All it means is if you wish to see racing continued, if you wish harness racing at your fair, this added-money plan will accomplish the end. If you make your purse $250, to put it conservatively, that costs your track $1,500, and then if you have thirty horses, that gives each horse $50. That's all there is to it in nutshell. If you still feel that the old style is the way to do, you may advertise that way, but you will find that the men cannot pay out and they won't come. Harness racing is just another vaudeville act and it must be paid out of our gate receipts and our grandstand, so that I think when fifty-two of our fairs have adopted it this year it will be almost unanimous next year. I think it is the one best bet that we have, and it is the only thing we would hate to lose. While a few of the fairs don't giving a racing card, the majority of the fairs do, and if you want it you must give it under that plan.

The Chairman: I would like to have Mr. White come forward and give his views on the added-money plan.

G. W. White, Malvern, Iowa: Mr. President and fair managers —A word with regard to the added money. The way it panned out at our fair this year, it was the best it ever was from the standpoint of treating the horsemen right. A year ago we had ninety-two or ninety-three straight entries. The entries all closed within the first four or five weeks of the meeting, and when the fair was on about half or a little over half of the horses saw they couldn't win anything and went away. Last year we gave $250 of added money. We closed the entries twelve days before the meeting opened. We didn't have quite as large a bunch of horses as before, I think we had sixty-seven or sixty-eight straight entries, but when we got ready to race we had sixty-three or sixty-four horses, and outside of two or three horses they all came to race. Some of our purses came up to $500, and fourth money was more than some had got out of third money, and we feel that added money gave us better races, better contested, than any other year we have ever had. Our track record previous to that was 2:11¼, which was equalled last year, and our pacing record was 2:09¼, which was reduced to 2:08¼ this last season. To show how we were racing, we started in at 1:30 in the afternoon and on two evenings we were still racing at seven o'clock. I think it was the best attraction we have ever had, and the best money we have ever spent in the way of attractions.

The Chairman: This is an important topic which we haven't time tonight to go into further. I want to take occasion at this time to call on a man who can tell the best stories of any fellow in the United States.

(Story telling and vaudeville acts.)

The Chairman: At this time I want to take occasion to announce the entertainment committee for the next year: W. R. Scholfield, Roy Wilkinson, Carl E. Hoffman.

I think this concludes the evening's entertainment.

PART IV

Live Stock Awards and Press Reports of the 1919 Iowa State Fair and Exposition

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HORSE DEPARTMENT

SUPERINTENDENT........................C. F. CURTISS, Ames, Iowa.

PERCHERONS.

EXHIBITORS—F. Berkey & Son, Ankeny; Champlin Bros., Clinton; A. L. Champlin, Ames; C. F. Curtis, Ames; Guy Donald, Corydon; Dunhams, Wayne, Ill.; George Eggert, Newton; Hurdcroft Farm, Monticello; S. M. Hague, Waukee; Hemigway Bros., West Branch; R. W. Hoit, Beacon; Iowa State College, Ames; W. L. Joy, Grand Junction; Frank Keenan & Son, Shenandoah; Lakewood Farm, Rock Rapids; Lee Bros., Mitchellville; I. H. Laverty, Indianola; J. C. Redman, Altoona; Randolph Bros., Green Valley, Illinois; J. O. Singmaster & Son, Keota; O. R. Smith, Altoona; Otto A. Trebish, Sleepyeye, Minnesota; Grover C. Wilkins, Blair, Nebraska; K. A. Wilson, Norwalk; R. P. Wait, Reynolds, Illinois.

JUDGE..............................WILLIAM BELL, Wooster, Ohio.

Stallion Five Years Old and Over—First and fourth, Dunhams, on Durant, 119302, LeRoy, 118485; second, Singmaster & Son, on Bozzaris, 104594; third, Lakewood Farm, on Agitator, 77533.

Stallion Four Years Old and Under Five—First, Singmaster & Son, on Marq, 128218; second and third, Dunhams, on Marshall, 127810, and Orton, 127814; fourth Grover C. Wilkins, on Moneter, 120310.

Stallion Three Years Old and Under Four—First, Singmaster & Son, on Maple Grove Gislain, 133567; second and third, Dunhams, on Dunhams Ingo, 134213, and Inventor 133129; fourth Singmaster & Son, on Maple Grove Street, 132526.

Stallion Two Years Old and Under Three—First and third, Singmaster & Son, on Maple Grove Noble, 140834, and Smith Creek Lagos, 139779; second, Dunhams, on Mark, 138366; fourth, J. C. Redman, on Earl, 141436; fifth and sixth, Hurdcroft Farm on Koikot, 137099, and Hercules; seventh, Lee Bros., on Leaside Knight, 147704; eighth, Lakewood Farm, on Lakewood Seducteur, 148252.

Stallion Foal—First, Guy Donald, on Young Pink; second, C. F. Curtiss, on Jubelee.

Mare Five Years Old and Over—First, Frank Keenan & Son, on LaJune, 88461; second, Hurdcroft Farm, on Blonda, 116082; third, Dunhams, on Monition, 106664, (108284).

Mare Four Years Old and Under Five—First, Hurdcroft Farm, on Beda, 126945; second, C. F. Curtiss, on Viola Rookwood, 131838.

Mare Three Years Old and Under Four—First and fourth, Hurdcroft Farm, on June 135677, and Alice, 134608; second and third, Geo. Eggert, on Maple Grove Nellie, 132528, and Diamond, 142956.

Mare Two Years Old and Under Three—First and second, Dunhams, on

SEVERN FLAG

Champion Shire Stallion of Iowa. F. A. Huddleston, Webster City, Iowa.

Perdita, 139073, and Merry Win, 140017; third, Iowa State College, on Queen Marion, 139476; fourth, Lee Bros., on Leaside Golda, 142035.

Mare Foal—First, Lee Bros., on Leaside Doll.

Mare and Foal—First, C. F. Curtiss, on Viola Rookwood, 131838; second, Lee Bros., on Babe Lea, 138382; third, Guy Donald.

Junior Champion Stallion—Singmaster & Son, on Maple Grove Favorite II, 151926; reserve, Singmaster & Son, on Maple Grove Noble, 140834.

Senior Champion Stallion—Dunhams, on Durant, 119302; reserve, Singmaster & Son, on Maple Grove Geslan, 133567.

Grand Champion Stallion—Dunhams, on Durant 119302; reserve, Singmaster & Son, on Maple Grove Favorite II, 151926.

Junior Champion Mare—Dunhams, on Predita 139073; reserve, Hurdcroft Farm, on Glory Anna.

Senior Champion Mare—Frank Keenan & Son, on La June, 88461; reserve, Hurdcroft Farm, on June, 135677.

Grand Champion Mare—Dunhams, on Predita, 139073; reserve, Hurdcroft Farm.

Champion Stallion Owned in Iowa—Singmaster & Son, on Maple Grove Favorite II, 151926; reserve, Singmaster & Son, on Maple Grove Geslan, 133567.

Champion Mare Owned in Iowa—Iowa State College, on Queen Marion, 139476; reserve, Frank Keenan & Son, on La June, 88461.

Get of Sire—First, Dunhams; second, Singmaster & Son; third, Hurdcroft Farm; fourth, Iowa State College.

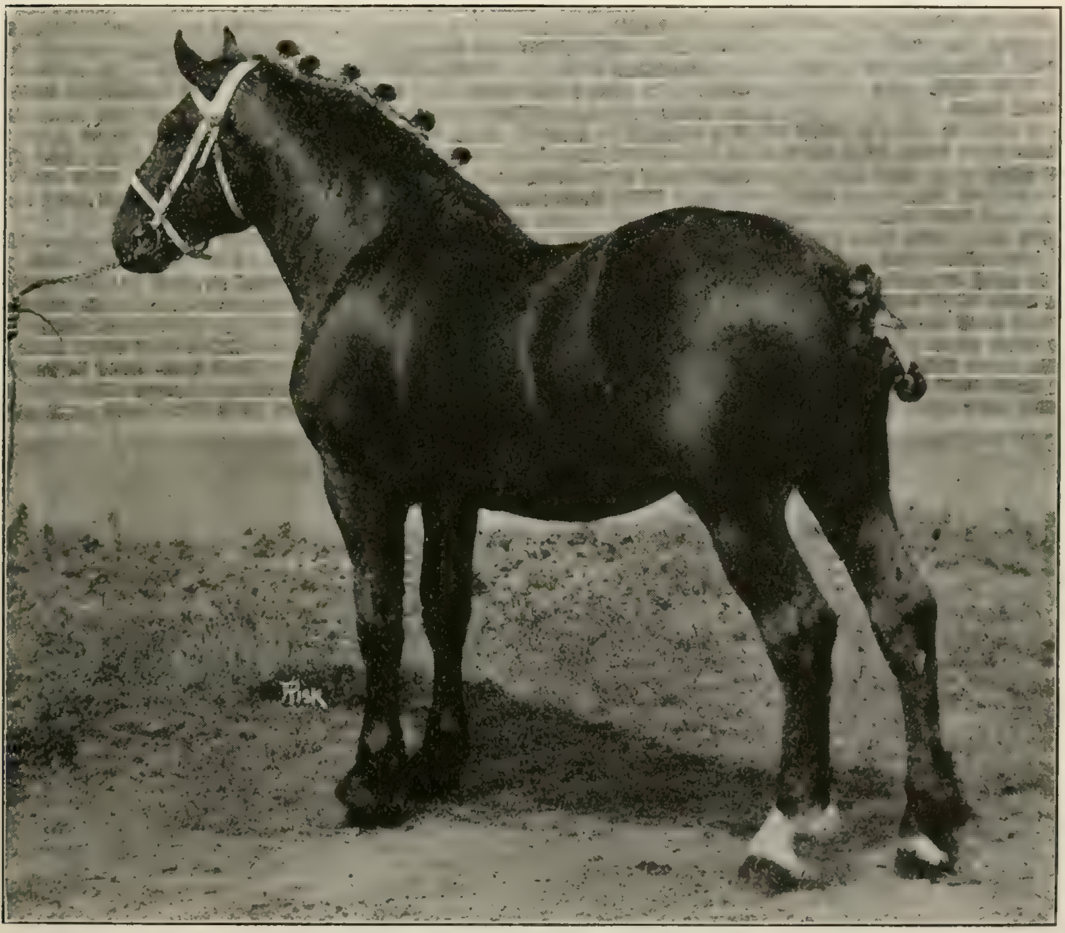
Produce of Mare—First, Hurdcroft Farm, on Blondee Luax; second, Lakewood Farm; third, Guy Donald.

Stallion and Three Mares, Any Age—First, Dunhams; second, Hurdcroft Farm.

Five Stallions—First, Singmaster & Son.

NATIONAL DRAFT HORSE BREEDERS' FUTURITY—PERCHERON DIVISION.

Stallions—First, Singmaster & Son, on Maple Grove Favorite II, 151926; second, Hurdcroft Farm, on Koelacia Junior; third Dunhams, on Ohio's Liberetto Lad, 149125; fourth, Singmaster & Son, on Flanders, 149783; fifth, A. L. Champlin, on Ames Krownprinz; sixth, Lakewood Farm, on Principal; seventh, Keenan & Son, on George 148731; eighth, J. C. Redman, on Big Ben; ninth, Lee Bros., on Leaside Inscrit, 150791; tenth, W. L. Joy, on Maple Drive Sylvan; eleventh, Lee Bros., on Butter Fly; twelfth, W. L. Joy, on Maple Drive Kato, 150990.



MAPLE GROVE FAVORITE II

First Prize National Percheron Breeders' Futurity Stallion. J. O. Singmaster & Sons, Keota, Iowa.

Fillies—First, Hurdcroft Farm, on Gloriana; second, Singmaster & Son, on Maple Grove Grace II, 151927; third, Dunhams, on Lucretia; fourth, Dunhams, on Bona; fifth, C. F. Curtiss, on Jeanette, 149784; sixth, W. L. Joy, on Maple Lawn Hazel; seventh, W. L. Joy, on Maple Drive Marion; eighth, Lee Bros., on Leaside Roseland, 148261.

CLYDESDALES.

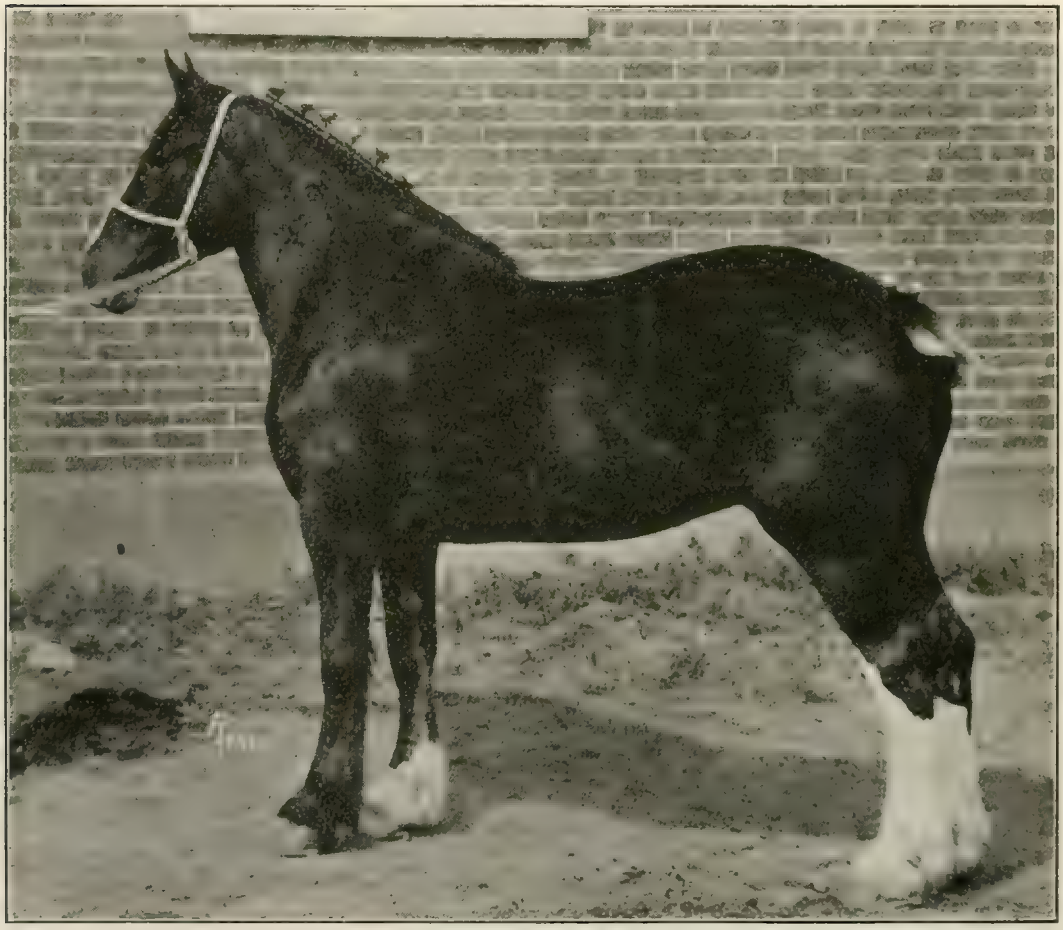
EXHIBITORS—F. L. Anderson, Ross; J. T. Eness, Gilbert; J. W. Hillman, Dana; J. C. Jarard, New Sharon; Eben A. Jones, Bangor, Wisconsin; G. W. Merna, Wyoming, Illinois; John Skinner Estate, Herman, Nebraska; South Bros., Orion, Illinois; A. G. Soderberg, Osco, Illinois; L. C. Tice, Sully; Grover C. Wilkins, Blair, Nebraska.

JUDGE..............................ANDREW MCFARLANE, Palo, Iowa.

Stallion Five Years Old and Over—First, South Bros., on General Davidson, 14424; second, Eben A. Jones, on W. J. Bryan, 17728; third, J. C. Jarard & Sons, on Advance, 17863.

Stallion Four Years Old and Under Five—First, South Bros., on Baby Lad, 21218.

Stallion Three Years Old and Under Four—First, South Bros., on Osco Majesty, 19661; second, South Bros., on Genes Hope; third, J. T. Eness, on Gilbert's Starlight, 20096.



BONITA
Grand Champion Clydesdale Mare. L. C. Tice, Sully, Iowa.

Stallion Two Years Old, and Under Three—First, J. C. Jarard & Son, on Sultan's Choice; second, Grover C. Wilkins, on Kingston, 20726; third, L. C. Tice, on Sultan's Pride, 20542.

Stallion Foal—First, G. W. Merna; second, Eben A. Jones, on Billie Boy.

Mare Five Years Old and Over—First, G. W. Merna, on Samuda's Violet, 17936; second, South Bros., on Shamrock's Beauty, 18548; third, South Bros., on Challenger's Sweetness, 18163; 4th, J. T. Eness, on Royal Princess, 18243; fifth, L. C. Tice, on Queen Alice, 17951; sixth, Eben A. Jones, on Grove Girl, 15887; seventh, G. W. Merna, on Mally, 17291.

Mare Four Years Old and Under Five—First, Eben A. Jones, on Silver Bell, 18976.

Mare Three Years Old and Under Four—First, L. C. Tice, on Bonita, 19895; second, Eben A. Jones, on Blythewood Maid 2nd, 20270; third, G. W. Merna, on Samuda Annie, 19977; fourth, L. C. Tice, on Bethene, 19894.

Mare Two Years Old and Under Three—First, L. C. Tice, on Sultan's Queen, 20543; second, Eben A. Jones, on Gipsy Queen, 20427; third, John Skinner Estate, on Stately Princess, 21216; fourth, Eben A. Jones on Bay Flossy, 20429.

Mare Foal—First, G. W. Merna; second, G. W. Merna; third, Eben A. Jones, on Jenning Pride.

Mare and Foal, 50% each—First, G. W. Merna, on Molly, 17291; second, G. W. Merna, on Samuda Violet, 17936; third, Eben A. Jones, on Grove Girl, 15887; fourth, Eben A. Jones, on Silver Bell, 18976.

Junior Champion Stallion—G. W. Merna, on McFarland; reserve, G. W. Merna.

Senior Champion Stallion—South Bros., on General Davidson, 14424; reserve, South Bros., on Osco Majesty, 19661.

Grand Champion Stallion—South Bros., on General Davidson, 14424; reserve, G. W. Merna, on McFarland.

Junior Champion Mare—L. C. Tice, on Sultan's Queen, 20543; reserve, South Bros., on Majesty's Beauty, 20865.

Senior Champion Mare—L. C. Tice on Bonita, 19895; reserve, G. W. Merna, on Samuda's Violet, 17936.

Grand Champion Mare—L. C. Tice, on Bonita, 19895; reserve, L. C Tice, on Sultan's Queen, 20543

Champion Stallion Owned in Iowa—J. C. Jarard, on Sultan's Choice.

Champion Mare Owned in Iowa—L. C. Tice, on Bonita, 19895; reserve, L. C. Tice, on Sultan's Queen, 20543.

Get of Sire—First, G. W. Merna, on Proud Archer; second, L. C. Tice, on Longwater Sultan; third, G. W. Merna, on Samuda; fourth, Eben A. Jones, on Jennings Bryan.

Produce of Mare—First, G. W. Merna, on Molly; second, L. C. Tice, on Lugana; third, Eben A. Jones, on Grove Girl.

Stallion and Three Mares, Any Age—First, G. W. Merna; second, South Bros.; third, Eben A. Jones; fourth, L. C. Tice.

Five Stallions—First, South Bros.

NATIONAL DRAFT HORSE BREEDERS' FUTURITY—CLYDESDALE DIVISION.

Yearling Stallions—First, G. W. Merna, on McFarland; second, L. C. Tice, on Young Clifton; third, L. C. Tice, on Lord Benedict; fourth, Eben A. Jones, on Lord Bryan, 20821; fifth, F. L. Anderson, on Weston, 21173; sixth, South Bros., on Davidson's Chief, 20864.

Yearling Fillies—First, South Bros., on Majesty's Beauty, 20865; second, L. C. Tice, on Delightful May; third, John Skinner Estate, on Quality Lass, 21205; fourth, G. W. Merna, on Marie; fifth, Eben A. Jones, on Criterion Dolly, 21139.

SHIRES.

Exhibitors—J. L. Howard, Ankeny; F. A. Huddleston, Webster City; J. S. Hildreth, Ankeny; Albert Rowe, Letts; O. R. Smith, Altoona; Smith Bros., Altoona; Tom Skola, Slater; M. H. Smiley, Dallas Center; A. G. Soderberg, Osco, Illinois; Charles H. & V. A. Summers, Malvern; Trumans' Pioneer Stud Farm, Bushnell, Illinois; Westbrook Stock Farm, Letts.

JUDGE............................A. LATIMER WILSON, Creston, Iowa.

Stallion Five Years Old and Over—First, Trumans' Pioneer Stud Farm, on Kirtling Bold Lion, 16769 (30593); second, F. A. Huddleston, on Severn Flag, 12749; third, J. S. Hildreth, on General Editor, 13405.

Stallion Four Years Old and Under Five—First, Trumans' Pioneer Stud Farm, on Dovecote Royal William, 16066 (33883).

Stallion Three Years Old and Under Four—First, Trumans' Pioneer Stud Farm, on Trumans' Blusterer, 17002; second, Trumans' Pioneer Stud Farm, on Eureka Standard, 17319; third, M. H. Smiley, on Edward Kersey, 17277.

Stallion Two Years Old and Under Three—First, Trumans' Pioneer Stud Farm, on William Dan Patch, 17636.

Stallion Foal—First, Westbrook Stock Farm, on Westbrook's Boro; second, F. A. Huddleston, on British Flag; third, Tom Skola, on Slater Echo, 18524; fourth, F. A. Huddleston, on Royal George.

Mare Five Years Old and Over—First, Trumans' Pioneer Stud Farm, on Hobbs Lotts Flirt, (835996); second, Albert Rowe, on Beeby Judy, 15402 (56018); third, F. A. Huddleston, on Heale Easter Eve, 9003 (51268); fourth, F. A. Huddleston, on Mahomet Princess. 15681; fifth, F. A. Huddleston, on Fay Queen, 17463.

Mare Four Years Old and Under Five—First, Trumans' Pioneer Stud Farm, on Trumans' Duchess II, 17229; second, Albert Rowe, on Bushnell Cozy, 16657; third, Albert Rowe, on Jemima, 16826 (83593); fourth, F. A. Huddleston, on Royal Lily, 16425.

Mare Three Years Old and Under Four—First, Trumans' Pioneer Stud Farm, on Trumans' Queen Blusterer, 17010; second, J. S. Hildreth, on Isabel Darling, 16778; third, F. A. Huddleston, on Mathel, 17186; fourth, Albert Rowe, on Sandringham Pictoral, 17737 (87119); fifth, J. S. Hildreth, on Belmont Vashti, 16858.

Mare Two Years Old and Under Three—First, Tom Skola, on Beauty Rex. 17789; second, Smith Bros., on Velda, 17996; third, Smith Bros., on Gene. 17994; fourth, J. S. Hildreth, on Whyr Selma. 17506.

Mare Foal—First, F. A. Huddleston, on Edgewood Lucile; second, F. A. Huddleston. on Edgewood Surprise; third, Smith Bros., on Beauty; fourth, Albert Rowe.

Mare and Foal, 50% Each—First, F. A. Huddleston, on Heale Easter Eve, 90003 (51268); second, F. A. Huddleston, on Fay Queen, 17463; third. West brook Stock Farm, on Eastern Manners, 15404 (75295); fourth, Westbrook Stock Farm, on Hobbs Lotts Daisy, 16825 (83595); fifth, Tom Skola, on Clawson Blossom, 14195.

Junior Champion Stallion—Trumans' Pioneer Stud Farm, on Hawthorn's Supreme; reserve, Trumans' Pioneer Stud Farm, on William Dan Patch, 17636.

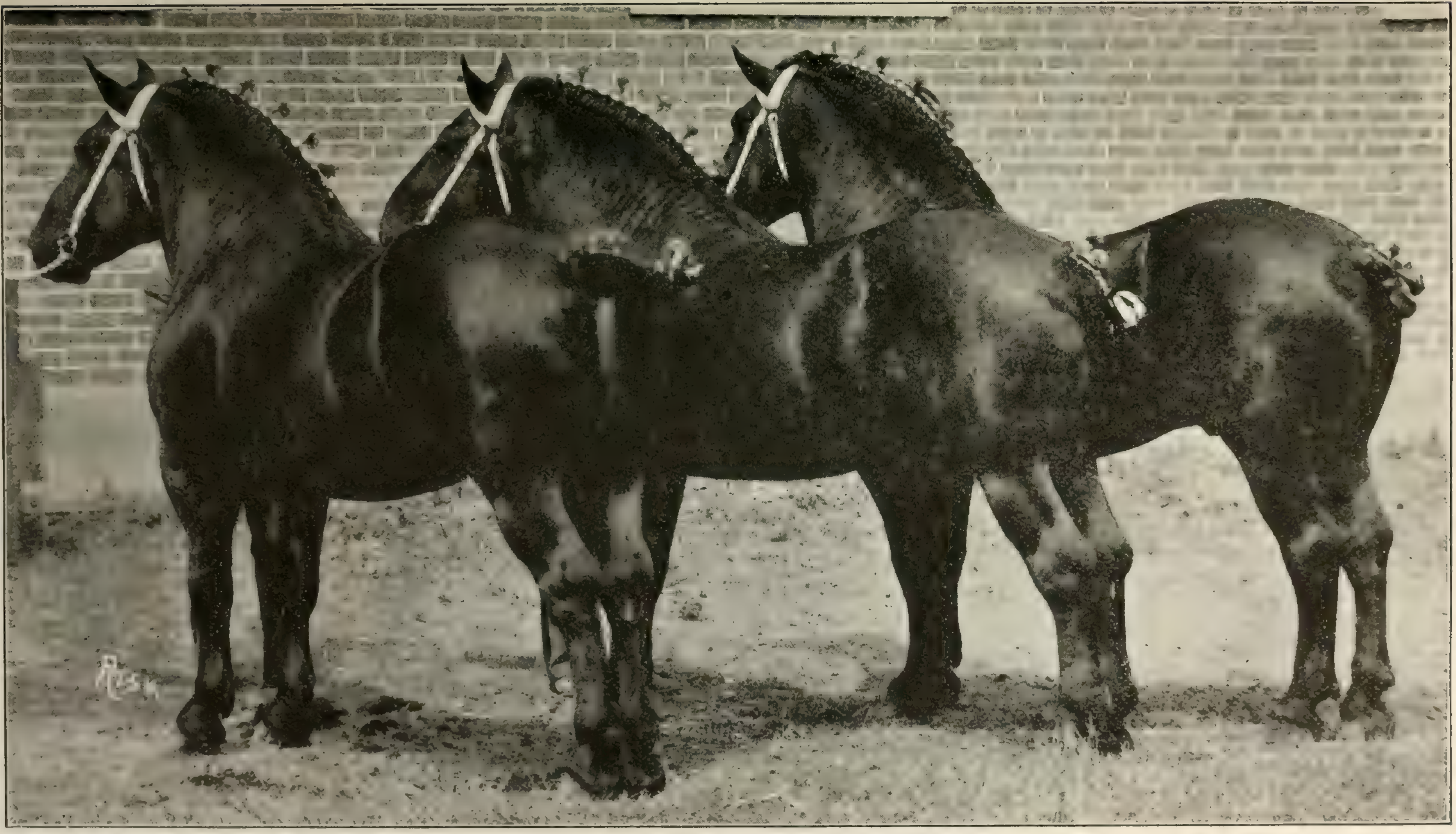
Senior Champion Stallion—Trumans' Pioneer Stud Farm, on Trumans' Blusterer 17002; reserve, Trumans' Pioneer Stud Farm, on Dovecote Royal William, 16066 (33883).

Grand Champion Stallion—Trúmans' Pioneer Stud Farm, on Trumans' Blusterer, 17002; reserve, Trumans' Pioneer Stud Farm, on Hawthorne Supreme.

Junior Champion Mare—C. A. Lindquist, on Beauty Rex, 17789; reserve, F. A. Huddleston, on Edgewood Lucile.

Senior Champion Mare—Trumans' Pioneer Stud Farm, on Hobbs Lotts Flirt, (83596); reserve, Trumans' Pioneer Stud Farm, on Trumans' Duchess II, 17229.

Grand Champion Mare—Trumans' Pioneer Stud Farm, on Hobbs Lotts Flirt, (83596); reserve, Tom Skola, on Beauty Rex, 17789.



FIRST PRIZE GET OF SIRE, PERCHERON
Dunham's, Wayne, Ill.

Champion Stallion Owned in Iowa—F. A. Huddleston, on Severn Flag, 12749 (28763); reserve, Westbrook Stock Farm, on Westbrook's Boro.

Champion Mare Owned in Iowa—Tom Skola, on Beauty Rex, 17789; reserve, Albert Rowe, on Beeby Judy, 15402 (56018).

Get of Sire—First, Trumans' Pioneer Stud Farm; second, Tom Skola; third, Smith Bros.; fourth, Westbrook Stock Farm.

Produce of Mare—First, Tom Skola; second, F. A. Huddleston; third, Smith Bros.

Grand Display—First, Trumans' Pioneer Stud Farm; second, Trumans' Pioneer Stud Farm; third, F. A. Huddleston; fourth F. A. Huddleston.

Five Stallions—First, Trumans' Pioneer Stud Farm.

NATIONAL DRAFT HORSE BREEDERS' FUTURITY, ENGLISH SHIRE DIVISION.

Stallions—First, Trumans' Pioneer Stud Farm, on Hawthorn's Supreme; second, J. L. Howard, on Wrydeland's Teddy; third, Trumans' Pioneer Stud Farm, on Hawthorne Advocate; fourth, J. L. Howard, on Wrydeland's Buster; fifth, F. A. Huddleston, on Edgewood Chief, 18252; sixth, Westbrook Stock Farm, on Kingston, 18455; seventh, Westbrook Stock Farm, on Prince Victor, 18454.

Fillies—First, C. A. Lindquist, on Daisy Bell, 18081; second, Trumans' Pioneer Stud Farm, on Hawthorn Star; third, J. L. Howard, on Lady's Charm; fourth, Smith Bros., on Gladys Fleet, 18465; fifth, Trumans' Pioneer Stud Farm, on Hawthorn Baroness; sixth, Smith Bros., on Glorious Flash 18463.

SPECIAL PRIZES OFFERED BY THE AMERICAN SHIRE HORSE ASSOCIATION.

Champion Stallion, Any Age—Trumans' Pioneer Stud Farm, on Trumans' Blusterer, 17002.

Champion Mare, Any Age—Trumans' Pioneer Stud Farm, on Hobbs Lott's Flirt, (83596).

Best American Bred Stallion, Any Age—Trumans' Pioneer Stud Farm, on Trumans' Blusterer, 17002.

Best American Bred Mare, Any Age—Tom Skola, on Beauty Rex, 17789.

SPECIAL PRIZES OFFERED BY THE SHIRE HORSE SOCIETY OF GREAT BRITAIN AND IRELAND.

Best Stallion—Trumans' Pioneer Stud Farm, on Trumans' Blusterer, 17002.

Best Mare—Trumans' Pioneer Stud Farm, on Hobbs' Lot's Flirt, (83596).

BELGIANS.

Exhibitors—J. J. Bonstetter, Corwith; Champlin Bros., Clinton; J. S. Chesney, Keota; Cahill Bros.. Rockford; Drewelow Bros., New Hampton; W. C. Estes, Packwood; C. G. Good, Ogden; Charles Irvine, Ankeny; J. W. Kerr, Mt. Sterling; Lakewood Farm, Rock Rapids; Henry Lefebure Sons Co., Fairfax; Simon Peterson, Ogden; J. C. Ritchie, Stratford; George Rupp, Lampman, Saskatchewan, Canada; A. O. Shelby, Kenneth, Minnesota.

Judge..................Alex Galbraith, Edmonton, Alberta, Canada.

Stallion Five Years Old and Over—First, Chas. Irvine, on Frison, 7590; second, J. W. Kerr, on Durandel, 4524.

Stallion Three Years Old and Under Four—First, Chas. Irvine, on Roudy, 11 10570; second, W. C. Estes, on Black Bruno, 10342; third, J. J. Bonstetter, on Marquis, 10364; fourth, Chas. Irvine, on Irvindale Jap, 10416; fifth, Henry Lefebure Sons' Co., on Fairfax Major, 10672.

Stallion Two Years Old and Under Three—First, Henry Lefebure Sons' Co., on Lefebure's Clarion, 11187; second, Chas. Irvine, on Irvinedale Frison, 10954; third, Chas. Irvine, on Irvinedale Superior, 10953; fourth, J. S. Chesney, on Jean Bart 3, 10942; fifth, Chas. Irvine, on Jupiters Model, 10670; sixth, Henry Lefebure Sons' Co., on Paramount Madero, 10574; seventh, Chas. Irvine, on Irvinedale Duke, 10958; eighth, Lakewood Farm, on Lakewood Omer, 11451; ninth, Chas. Irvine, on Irvinedale Brutus, 10951; tenth, J. W. Kerr, on Mt. Sterling Jean, 10851; eleventh, J. J. Bonstetter, on Grand View Protendent, 11343.

Stallion Foal—First, J. C. Ritchie, on Dempsey Farceur.

Mare Five Years Old and Over—First, Chas. Irvine, on Salome, 4871; second, Henry Lefebure Sons' Co., on Homerino, 4360; third, J. W. Kerr, on Jolie D. Thimeon, 2539; fourth, Chas. Irvine, on Suzette, 4031; fifth, W. C. Estes, on Bay Beauty; sixth, J. W. Kerr, on Justine, 1328.

OAKDALE GIRL

Grand Champion Belgian Mare. C. G. Good, Ogden, Iowa.

Mare Four Years Old and Under Five—First, Drewelow Bros., on Paramount Blue Belle, 5409; second, J. C. Ritchie, on Gazelle 11, 5264.

Mare Three Years Old and Under Four—First, C. G. Good, on Oakdale Girl, 6201; second, C. G. Good, on Paramount Lulu, 6014; third, Chas. Irvine, on Burd, 5915; fourth, J. W. Kerr.

Mare Two Years Old and Under Three—First, Henry Lefebure Sons' Co., on Fairfax Pudge, 6342; second, Chas. Irvine, on Irvinedale Jeanette, 6678; third, Chas. Irvine, on Irvinedale Fayette, 6674; fourth, W. C. Estes, on Orphan Girl, 6698; fifth, W. C. Estes, on Bright Beauty, 6696; sixth, W. C Estes, on Maggie De Ghorain, 6697.

Mare Foal—First, C. G. Good, on Farcette; second, Chas. Irvine, on Irvinedale Salome; third, C. G. Good on Farceurette; fourth, Chas. Irvine on Irvinedale Suzette.

Mare and Foal, 50% Each—First, C. G. Good, on Chere, 2427; second, Chas. Irvine, on Salome, 4871; third, Chas. Irvine, on Suquette, 4031; fourth, C. G. Good, on Civette, 3065; fifth, J. W. Kerr, on Mace, 3585.

Junior Champion Stallion—Lefebures Sons' Co., on Lefebure's Clarrion, 11187; reserve, J. C. Ritchie, on Irvinedale De Bree Eyck.

Senior Champion Stallion—Chas. Irvine, on Roudy 2, 10570; reserve, Chas. Irvine, on Frison, 7590.

Grand Champion Stallion—Lefebure Sons' Co., on Lefebure's Clarrion, 11187; reserve, Chas. Irvine, on Roudy 2, 10570.

Junior Champion Mare—C. G. Good, on Farcette; reserve, Lefebure Sons' Co., on Fairfax Pudge, 6342.

Senior Champion Mare—C. G. Good, on Oakdale Girl, 6201; reserve, Chas. Irvine, on Salome, 4871.

Grand Champion Mare—C. G. Good, on Oakdale Girl, 6201; reserve, Chas. Irvine, on Salome, 4871.

Champion Stallion Owned in Iowa—Lefebure Sons' Co., on Lefebure's Clarion, 11187; reserve, Chas. Irvine, on Roudy 2, 10570.

Champion Mare Owned in Iowa—C. G. Good, on Oakdale Girl, 6201; reserve, Chas. Irvine, on Salome, 4871.

Get of Sire—First, Chas. Irvine; second, J. C. Ritchie.

Produce of Mare—First, C. G. Good; second, C. G. Good; third, Chas. Irvine; fourth, J. C. Ritchie.

Stallion and Three Mares, Any Age—First, Henry Lefebure Sons' Co.; second, Chas. Irvine; third, J. C. Ritchie; fourth, W. C. Estes.

Five Stallions—Chas. Irvine, on Frison, 7590; Roudy 2, 10570; Ivondale Frison, 10954; Irvinedale Superior, 10953; Jupiter's Model, 10670.

NATIONAL DRAFT HORSE BREEDERS' FUTURITY—BELGIAN DIVISION.

Stallion Over One Year, Under Two—First, J. C. Ritchie, on Irvinedale De Bree Eyck; second, J. J. Bonstetter, on Liberty Chief; third, Charles Irvine, on Irvinedale Prince; fourth, Lakewood Farm, on Roscoe; fifth, J. W. Kerr, on Irvine 10982; sixth, J. C. Ritchie, on Maurice De Maeter; seventh, Lakewood Farm, on Roswell.

Filly Over One Year, Under Two—First, Simon Peterson, on Charlotte; second, J. C. Ritchie, on Janette De Maeter; third, H. Lefebure Sons' Co., on Lefebure's Diane; fourth, Simon Peterson, on Marguerite; fifth, George Rupp, on Lady Wolver; sixth, J. C. Ritchie, on Rosette De Maeter; seventh, C. G. Good, on Blawette II; eighth, Lakewood Farm, on Lady Dampierre; ninth, J. W. Kerr, on Beauty.

SPECIAL PRIZES OFFERED BY THE AMERICAN ASSOCIATION OF IMPORTERS AND BREEDERS OF BELGIAN DRAFT HORSES.

Stallion Three Years Old and Under Four—First, Charles Irvine, on Roudy II, 10570; W. C. Estes, on Black Bruno, 10342; third, J. J. Bonstetter, on Marquise, 10364; fourth, Charles Irvine, on Irvinedale Jap, 10416; fifth, Henry Lefebure Sons' Co., on Fairfax Major, 10672.

Stallion Two Years Old and Under Three—First, Henry Lefebure Sons' Co., on Lefebure's Clarion, 11187; second, Charles Irvine, on Ivondale Frison, 10954; third, Charles Irvine, on Irvinedale Superior, 10953; fourth, J. A. Chesney, on Jean Bart III, 10942; fifth, Charles Irvine, on Jupiter's Model, 10670.

Stallion One Year Old and Under Two—First, J. C. Ritchie, on Irvinedale De Bree Eyck; second, J. J. Bonnstetter, on Liberty Chief; third, Charles Irvine, on Irvinedale Prince; fourth, Lakewood Farm, on Roscoe.

Mare Four Years Old and Over—First, Drewelow Bros., on Paramount Blue Belle, 5409; second, J. C. Ritchie, on Gazelle II, 5264.

Mare Three Years Old and Under Four—First, C. G. Good, on Oakdale Girl, 2601; second, C. G. Good, on Paramount Lulu, 6014; third, Charles Irvine, on Burd, 5915; fourth, J. W. Kerr.

Mare Two Years Old and Under Three—First, Henry Lefebure Sons Co., on Fairfax Pudge, 6342; second, Charles Irvine, on Irvinedale Jeanette, 6678; third, Charles Irvine, on Irvinedale Fayette, 6674; fourth, W. C. Estes, on Orphan Girl, 6698; fifth, W. C. Estes, on Bright Beauty, 6696.

Mare One Year Old and Under Two—First, Simon Peterson, on Charlotte; second, J. C. Ritchie, on Janette De Maeter; third, Henry Lefebure Sons Co., on Lefebure's Diane; fourth, Simon Peterson, on Marguerite.

Junior Champion Stallion Under Three Years of Age—Henry Lefebure Sons Co., on Lefebure's Clarion, 11187; reserve, J. C. Ritchie, on Irvinedale De Bree Eyck.

Senior Champion Stallion Three Years and Over—Charles Irvine, on Roudy 2nd, 10570; reserve, Charles Irvine, on Frison, 7590.

Grand Champion Stallion, All Ages Competing—Henry Lefebure Sons Co., on Lefebure's Clarion, 11187; reserve, Charles Irvine, on Roudy II, 10570.

Junior Champion Mare Under Three Years of Age—C. G. Good, on Farcette; reserve, Henry Lefebure Sons Co., on Fairfax Pudge, 6342.

Senior Champion Mare Three Years and Over—C. G. Good, on Oakdale Girl, 6201; reserve, Charles Irvine, on Salome, 4871.

Grand Champion Mare, All Ages Competing—C. G. Good, on Oakdale Girl, 6201; reserve, Charles Irvine, on Salome, 4871.

Five Stallions, Property of One Exhibitor—First, Charles Irvine.

DRAFT GELDINGS AND MARES.

Exhibitors—George Eggert, Newton; W. C. Estes, Packwood; J. S. Hildreth, Ankeny; F. A. Huddlestun, Webster City; Frank Keenan & Son, Shenandaoh: J. W. Kerr, Mt. Sterling; Lee Bros., Mitchellville; James Pedley, Britt; J. C. Ritchie, Stratford; O. R. Smith, Altoona; L. C. Tice, Sully; Wilson & Co., Chicago, Illinois.

Judge.................................R. B. Ogilvie, Chicago, Ill.

Gelding or Mare Four Years or Over—First, James Pedley, on Ross; second, W. C. Estes, on Charley; third, J. C. Ritchie, on Queen; fourth, Frank Keenan & Sons, on Bell.

Gelding or Mare Three Years and Under Four—First, W. C. Estes, on Joe.

Gelding or Mare Two Years and Under Three—First, W. C. Estes, on Queen; second, W. C. Estes, on Pete; third, O. R. Smith, on Nell; fourth, J. C. Ritchie, on Bell.

Gelding or Mare One Year and Under Two—First, W. C. Estes, on Dandy; second, Lee Bros., on Nelly; third, Guy Donald, on Bess; fourth, J. C. Ritchie, on Flora.

Farmer's Team—First, J. W. Kerr, on Justina, 1328, and Jolie De Thimeon, 2539; second, L. C. Tice; third; J. C. Hildreth; fourth, Frank Keenan & Sons, on La June & Bell; fifth, Geo. Eggert, Newton.

Gelding or Mare, Three Years or Over—First, second, third, fourth, fifth, Wilson & Co.

Draft Team in Harness—First, second, third, Wilson & Co.; fourth, J. W. Kerr, on Justina, 1328, and Jolie De Thimeon, 2539.

Champion Gelding or Mare—Wilson & Co.

Four-horse Team—First, Wilson & Co.

Six-horse Team—First, Wilson & Co.

ROADSTERS.

Exhibitors—George R. Boyd, Springfield, Illinois; George Brandeis, Fairacres, Nebraska; Joseph C. Brunk, Springfield, Illinois; H. S. Burnham, Colorado Springs, Colorado; H. S. Burnham and A. A. Hunter, Colorado Springs and Walden, Colorado; H. S. Burnham and P. E. Smith, Colorado Springs and Pueblo, Colorado; H. S. Burnham and John H. Voorhees, Colorado Springs and Pueblo, Colorado; A. L. Champlin, Ames; R. L. Davis, Kansas City, Missouri; H. F. Griffin, Riverside; Hamilton Bros., Keota; Bert Harmon, Des Moines; C. R. Wells and Bruce Robinson, Washington; W. B. Reynolds, Alta.

Judge..............................Oscar Seeley, Philadelphia, Pa.

Stallion, Mare or Gelding—First, R. L. Davis, on Ward Han, Jr.; second, George Brandeis, on Princess McDonald; third, R. L. Davis, on Advance Man; fourth, Hamilton Bros., on Major.

Pair Stallions, Mares or Geldings—First, R. L. Davis, on Advance Man & mate; second, C. R. Wells & Bruce Robinson, on Lonnie McDonald, & mate; third, Hamilton Bros., on Major and mate; fourth, A. L. Champlin, on Roy Templeton and mate.

RUNABOUTS.

Exhibitors—George R. Boyd, Springfield, Illinois; Joseph C. Brunk, Springfield, Illinois; H. S. Burnham and A. A. Hunter, Colorado Springs and Walden, Colorado; H. S. Burnham and P. E. Smith, Colorado Springs and Pueblo, Colorado; A. L. Champlin, Ames; R. L. Davis, Kansas City, Missouri; H. F. Griffin, Riverside; Hamilton Bros., Keota; Morgan Horse Farm, Plainfield; C. R. Wells and Bruce Robinson, Washington.

Stallion, Mare or Gelding—First, R. L. Davis, on Advance Man; second, R. L. Davis, on Ward Ham, Jr.; third, Hamilton Bros., on Mate; fourth, Wells & Robinson, on Moody the Great.

Pair Stallions, Mares or Geldings—First, R. L. Davis, on Advance Man and mate; second, Wells & Robinson, on Moody the Great and mate; third, A. L. Champlin.

LADIES' TURNOUT.

Exhibitors—H. S. Burnham, Colorado Springs, Colorado; H. S. Burnham and John H. Voorhees, Colorado Springs and Pueblo, Colorado; A. L. Champlin, Ames; R. L. Davis, Kansas City, Missouri; George A. Heyl, Washington, Illinois; Hamilton Bros., Keota.

Single Mare or Gelding—First, George A. Heyl, on Trillo Magic; second, A. L. Champlin, on High Ball; third, A. L. Champlin, on May Maiden.

Pair Mares or Geldings or Mare and Gelding—First, George A. Heyl, on Northern Light, 67524, and Trillo Magic, 2895; second, A. L. Champlin, on High Ball and May Maiden.

HIGH STEPPERS AND PARK HORSES.

Exhibitors—George R. Boyd, Springfield, Illinois; A. L. Champlin, Ames; R. L. Davis, Kansas City, Missouri; George A. Heyl, Washington, Illinois; C. R. Wells and Bruce Robinson, Washington.

Stallion, Mare or Gelding, 15 to 15-2—First, A. L. Champlin, on Willson Mathis; second, A. L. Champlin, on Pactalus Prince; third, C. R. Wells & Bruce Robinson, on Lonnie McDonald.

Stallion, Mare or Gelding, 15-2 and Over—First, A. L. Champlin, on High Ball; second, George A. Heyl, on Secret, 27071; third, A. L. Champlin, on Ray Templeton; fourth, A. L. Champlin, on May Maiden.

Pair Stallions, Mares or Geldings, Over 15-2—First, A. L. Champlin, on High Ball and mate.

Stallion, Mare or Gelding, Any Height, Horse Alone to be Considered—First, A. L. Champlin, on High Ball; second, A. L. Champlin.

GIG HORSES.

EXHIBITORS—A. L. Champlin, Ames; George A. Heyl, Washington, Illinois; C. R. Wells and Bruce Robinson, Washington.

JUDGE..............................OSCAR SEELEY, Philadelphia, Pa.

Horses Not Exceeding 15-2—First, Geo. A. Heyl, on Trillo Magic; second, A. L. Champlin, on Pactalus Prince; third, A. L. Champlin.

Horses Over 15-2—First, A. L. Champlin, on High Ball; second, A. L. Champlin; third, George A. Heyl, on Secret.

TANDEMS.

EXHIBITORS—A. L. Champlin, Ames; George A. Heyl, Washington, Illinois.

Tandem Team, Wheeler over 15-2—First, A. L. Champlin, on High Ball and May Maiden.

Tandem Team, Wheeler Under 15-2—First, George A. Heyl, on First Fashion and Good Will; second, A. L. Champlin.

Tandem Team, Any Size, Horses Alone to be Considered—First, George A. Heyl, on First Fashion and Good Will; second, A. L. Champlin.

UNICORNS.

EXHIBITORS—A. L. Champlin, Ames; George A. Heyl, Washington, Illinois; C. T. Hall, Carthage, Missouri.

Unicorn Team, 15-1 and Over—First, A. L. Champlin.

FOUR-IN-HANDS.

EXHIBITORS—A. L. Champlin, Ames; George A. Heyl, Washington, Illinois.

Road Four—First, A. L. Champlin.

Park Four—First, George A. Heyl; second, A. L. Champlin.

CHAMPIONSHIP HARNESS HORSE.

Champion Harness Stallion—R. L. Davis, on Waham, Jr.; reserve, George R. Boyd, on La Baron Gloriam.

Champion Harness Mare or Gelding—R. L. Davis, on Advance Man; reserve, A. L. Champlin, on High Ball.

SADDLE HORSES.

EXHIBITORS—H. S. Burnham, Colorado Springs, Colorado; H. S. Burnham and Art Allen, Colorado Springs and Pueblo, Colorado; H. S. Burnham and A. A. Hunter, Colorado Springs and Walden, Colorado; H. S. Burnham and P. E. Smith, Colorado Springs and Pueblo, Colorado; H. S. Burnham and John H. Voorhees, R. L. Davis, Kansas City, Mo., Colorado Springs and Pueblo, Colorado; George Brandeis, Fairacres, Nebraska; H. C. Downing, Des Moines; H. F. Griffin, Riverside; C. T. Hall, Carthage, Missouri; Hamilton Bros., Keota; Miss Rhea Johnston, Des Moines; Mrs. Harry B. Kinnard, Des Moines; George Mallonee, Herndon; Capt. Daniel C. Newquist, Camp Dodge; Miss Bertha Saemisch, Jamaica; Mrs. Adam Stirling, Des Moines; C. R. Wells and Bruce Robinson, Washington.

JUDGE..................................HENRY CULLINS, Devon, Pa.

Stallion Fours Years and Over—First, R. L. Davis, on I'll Show You, 7372; second, C. T. Hall, on Takoma King; third, Well & Robinson, on Rex Wells; fourth, H. S. Burnham, on Billy Squirrel, 4337.

Mare Four Years Old and Over—First, George Brandeis, on Princess Mc-

Donald; second, C. T. Hall, on Sadie Satin, 11260; third, Hamilton Bros., on Virginia Lear, 11260; fourth, B. R. Pemberton; fifth, Mark Dempsey & Sons, on Flossie W.

Mare Three Years Old and Under Four—First, B. R. Pemberton; second, Wells & Robinson.

Gelding Four Years Old and Over—Geo. Brandeis, Over The Top; second, Mark Dempsey; third, R. L. Davis, on Diplomat; fourth, H. S. Burnham, on Silver Dare; fifth, B. R. Pemberton, on Powell Peauine.

Gelding Three Years Old and Under Four—First, H. S. Burnham, on Mary's Dare.

Mare or Gelding, Any Age, Over 15-2 and up to Carrying 200 Pounds—First, George Brandeis, on Sparkling Burgundy; second, B. R. Pemberton, on Chieftain; third, R. L. Davis, on Diplomat; fourth, C. T. Hall, on Homa; fifth, R. L. Davis, on Astral Actor.

Mare or Gelding, Any Age, Under 15-2—First, R. L. Davis, on General Joffre; second, B. R. Pemberton, on Hazel Dear; third, Hamilton Bros., on Major; fourth, C. R. Wells & Bruce Robinson, on Peaches, 11793; fifth, R. L. Davis, on Bessie L. McDonald, 12139.

Pair Three-gaited Saddle Horses—First, R. L. Davis, on General Joffre and mate; second, B. R. Pemberton, on Chieftain and James; third, H. S. Burnham, on Mary's Dare and mate.

Pair Five- gaited Saddle Horses—First, B. R. Pemberton, on Powell Peauine and mate; second, R. L. Davis, on Bessie Williams and mate.

Best Lady or Girl Rider, on Suitable Mount—First, Mrs. Harry B. Kennard; second, R. L. Davis; third, Mrs. Adam Stirling; fourth, Mrs. Bertha Seamisch; fifth, Capt. Daniel Newquist.

Stallion, Mare or Gelding, Any Age. Five-gaited—First, George Brandeis, on Princess McDonald; second, H. C. Downing, on Cigarette; third, R. L. Davis, on Astral Actor; fourth, Burnham & Vorhees, on Silver Dare; fifth, R. L. Davis, on Diplomat.

Stallion, Mare or Gelding, Any Age, Three-gaited—First, B. R. Pemberton; second, R. L. Davis; third, Hamilton Bros.; fourth, Wells & Robinson; fifth, R. L. Davis.

Stallion, Mare or Gelding, Any Age—First, C. R. Wells & Bruce Robinson, on Rex Wells; second, H. S. Burnham & J. H. Vorhees, on Silver Dare; third, H. S. Burnham and Art Allen, on Billy Squirrel.

Stallion, Mare or Gelding, Five-gaited, Three Years or Over—First, Hamilton Bros., on Virginia Lear; second, H. C. Downing, on Cigarette; third, Wells & Robinson, on Lonnie McDonald.

Stallion, Mare or Gelding, Three-gaited, Three Years or Over—First, Hamilton Bros., on Major; second, Wells & Robinson, on Peaches; third J. K. Mallonce, on Lad; fourth, Hamilton Bros., on Chimes; fifth, Saemisch, on Bug.

SADDLE HORSE STAKE.

Exhibitors—George Brandeis, Fairacres, Nebraska; H. S. Burnham and Art Allen, Colorado Springs, and Pueblo, Colorado; H. S. Burnham and A. A. Hunter, Colorado Springs and Walden, Colorado; H. S. Burnham and John H. Voorhees, Colorado Springs and Pueblo, Colorado; R. L. Davis, Kansas City, Missouri; H. C. Downing, Des Moines; H. F. Griffin, Riverside; C. T. Hall, Carthage, Missouri; Hamilton Bros., Keota; George Mallonee, Herndon; Miss Bertha Saemisch, Jamaica.

Stallion, Mare or Gelding, Any Age—First, George Brandeis, on Over The Top; second, George Brandeis, on Princess McDonald; third, C. T. Hall, on Sadie Satin; fourth, R. L. Davis, on Victory Bell; fifth, Mark Dempsey, on Jack Dempsey; sixth, R. L. Davis, on Astral Actor; seventh, H. C. Downing, on Cigarette, eighth, Hamilton Bros., on Virginia Lear.

HUNTERS AND HIGH JUMPING.

EXHIBITORS—Captain Daniel C. Newquist, Camp Dodge.

JUDGE..............................HENRY CULLENS, Devon, Pa.

Heavy-weight Hunters, Up to Carrying 200 Pounds, to Hounds—First, Captain Newquist, on Doc.

MILITARY HORSES.

EXHIBITORS—A. L. Champlin, Ames; Jos. C. Brunk, Springfield, Illinois; H. S. Burnham and Art Allen, Colorado Springs and Pueblo, Colorado; H. F. Griffin, Riverside; C. T. Hall, Carthage, Missouri; Hamilton Bros., Keota; Morgan Horse Farm, Plainfield; Capt. Daniel C. Newquist, Camp Dodge; W. B. Reynolds, Alta; A. E. Warren, Des Moines.

JUDGE..............................MAJ. J. R. LINCOLN, Ames, Iowa.

Gelding Suitable for Officers' Mount—First, Hamilton Bros.; second, Capt. D. C. Newquist, on Jack; third, Capt. D. C. Newquist, on Doc.

Stallion Suitable to Sire Cavalry Remounts to be Shown to Halter—First, Wells & Robinson; second, J. C. Brunk, on Senator Knox; third, J. C. Brunk, on Sentiment; fourth, A. L. Champlin.

STANDARD BRED TROTTERS.

EXHIBITORS—George R. Boyd, Springfield, Illinois; A. L. Champlin, Ames; Arthur Cobb, Bedford; H. F. Griffin, Riverside; Bert Harmon, Des Moines; A. E. Warren, Des Moines; W. B. Reynolds, Alta.

JUDGE..............................HENRY CULLENS, Devon, Pa.

Stallion Four Years or Over—First, A. L. Champlin, on Pactolus Prince, 52040; second, George R. Boyd, on Le Baron Glorium, 40222; third, A. L. Champlin, on Ray Templeton, 56769.

Stallion Over Three, Under Four—First, A. E. Warren, on Willoughby Boy.

Stallion or Mare Foal—First, Arthur Cobb, on Ava Mobel, Vol. 22.

Yeld Mare, Four Years or Over—First, A. L. Champlin, on Alacantra's Pride.

Mare and Foal, 50% Each—First, Arthur Cobb, on Ava Mobel and foal.

Champion Stallion—A. L. Champlin, on Pactolus Prince; reserve, George R. Boyd, on Le Baron Glorium, 40222.

Champion Mare—Arthur Cobb, on Ava Mobel, Vol. 22.

Stallion and Three Mares—First, A. L. Champlin.

MORGANS.

EXHIBITORS—Jos. C. Brunk, Springfield, Illinois; H. S. Burnham and E. P. Smith, Colorado Springs and Pueblo, Colorado; Morgan Horse Farm, Plainfield.

JUDGES..............................{ OSCAR SEELEY, Philadelphia, Pa.
HENRY CULLENS, Devon, Pa.

Stallion Four Years or Over—First, Jos. C. Brunk, on Sentiment, 5730; second, Morgan Horse Farm, on St. Peter, 6734.

Stallion Three Years, Under Four—First, Jos. C. Brunk, on Senator Knox, 6132; second, Morgan Horse Farm, on Jiggs.

Mare Four Years or Over—First, Jos. C. Brunk, on Daisy De Jarnette; second, Morgan Horse Farm, on Lady Jane Bay, 143 Vol. 4; third, Burnham & Smith, on Mable Reed.

Mare Over Three, Under Four—First, Jos. C. Brunk, on Jean Anne; second, Jos. C. Brunk, on Lady De J; third, Morgan Horse Farm, on Village Bell, Vol. 4.

Stallion or Mare Foal—First, Jos. C. Brunk.

Champion Stallion—Jos. C. Brunk, on Senator Knox, 6132; reserve, Jos. C. Brunk, on Sentiment, 5730.

Champion Mare—Jos. C. Brunk, on Daisy De Jarnette; reserve, Morgan Horse Farm, on Lady Jane Bay, 143 Vol. 4.

Stallion and Three Mares—First, Jos. C. Brunk; second, Morgan Horse Farm.

HACKNEYS.

Exhibitors—A. L. Champlin, Ames; Geo. A. Heyl, Washington, Illinois; Frank T. Pemberton, Iowa Falls.

Judges.................................. { Oscar Seeley, Philadelphia, Pa.
{ Henry Cullens, Devon, Pa.

Stallion Four Years or Over—First, A. L. Champlin.

Stallion Over Three, Under Four—First, Frank T. Pemberton, on Major Green, 1920.

Stallion Over Two, Under Three—First, George A. Heyl.

Stallion or Mare Foal—First, George A. Heyl, on Delhamton Best; second, A. L. Champlin.

Yeld Mare Four Years or Over—First, George Heyl, on First Fashion; second, George Heyl, on Good Will.

Mare Over Three, Under Four—First, George A. Heyl, on Northern Light.

Filly Over Two, Under Three—First, George A. Heyl; second A. L. Champlin, on Lady Greenhill, 3281.

Brood Mare With Foal at Side—First, A. L. Champlin, on Imp, Fair Eliza, 3182; second George A. Heyl.

Champion Stallion—George A. Heyl; reserve, Frank Pemberton.

Champion Mare—George A. Heyl, on First Fashion; reserve, George A. Heyl, on Rougham Mite.

Five Animals Owned by Exhibitor—First, George A. Heyl.

WELSH PONIES.

Exhibitors—Earl M. Dixon, New Boston, Illinois; George A. Heyl, Washington, Illinois; Mrs. Adam Stirling, Des Moines.

Judge..............................W. J. Kennedy, Sioux City, Iowa.

Stallion Four Years or Over—First, Earl M. Dixon; second, Earl M. Dixon; third, Mrs. Adam Stirling, on King Lear, 985.

Mare Four Years or Over—First, Earl M. Dixon, on Pride of Prides; second, Earl M. Dixon, on Dainty Seconds; third, Mrs. Adam Stirling, on Lynette, 984.

Mare Three Years, Under Four—First, Earl M. Dixon, on Pride; second. Mrs. Adam Stirling, on Empress.

Mare Two Years, Under Three—First, Earl M. Dixon, on Eudora.

Champion Stallion—Earl M. Dixon; reserve, Earl M. Dixon.

Champion Mare—Earl M. Dixon, on Pride of Prides; reserve, Earl M. Dixon, on Pride.

Stallion and Three Mares—Earl M. Dixon.

SHETLAND PONIES.

Exhibitors—Frank Brideson, Bayard; George Brideson, Panora; F. H. Divan & Son, Monroe, Wisconsin; Earl M. Dixon, New Boston, Illinois; George

A. Heyl, Washington, Illinois; H. M. and R. M. Jones, Des Moines; Mrs. Adam Stirling, Des Moines; J. C. Thompson, Perry; D. G. Welty, Nevada; F. R. Wilson, Colo.

JUDGE............................ANDREW McFARLANE, Palo, Iowa.

Stallion Four Years and Over—First, Mrs. Adam Stirling, on Faultless, 14459; second, Earl M. Dixon, on Tipps; third, Earl M. Dixon, on Silver Crest; fourth, F. H. Divan & Son, on Perfection Larigo 14946; fifth, F. R. Wilson, on Silver of Bramelhope Villa.

Stallion Three Years, Under Four—First, Earl M. Dixon, on Vesuvius; second, F. R. Wilson, on Prince Kennedy, 17859; third, D. G. Welty, on Larigo B.

Stallion Two Years, Under Three—First, H. M. & R. M. Jones, on Premier; second, Earl M. Dixon, on King of Mist; third, Mrs. Adam Stirling, on Donald; fourth, Mrs. Adam Stirling, on Judge, 10872.

Stallion or Mare Foal—First, F. H. Divan & Son, on Gold Leaf Larigo; second, F. R. Wilson; third, F. H. Divan & Son, on Larigo Boy; fourth, J. C. Thompson.

Mare Four Years or Over—First, Earl M. Dixon; second, Mrs. Adam Stirling, on Queen of Flett, 11968; third, Mrs. Adam Stirling, on Blackbird; fourth, Earl M. Dixon.

Mare Three Years, Under Four—First, D. G. Welty, on Cigarette; second, Mrs. Adam Stirling, on Boston's Beauty; third, F. H. Divan & Son, on Lauren's Larigo, 17440; fourth, Earl M. Dixon, on Lucetta.

Mare Two Years, Under Three—First, Earl M. Dixon, on Tinker Belle; second, D. G. Welty, on Nevada Girl; third, Mrs. Adam Stirling, on Queen's Princess; fourth, George Brideson.

Mare and Foal—First, D. G. Welty; second, F. H. Divan & Son, third, F. H. Divan & Son, on Lauren's Larigo; fourth, J. C. Thompson.

Four Colts, Get of One Sire—First, Mrs. Adam Stirling; second, D. G. Welty; third, Earl M. Dixon; fourth, F. H. Divan & Son.

Champion Stallion—Mrs. Adam Stirling, on Faultless; reserve, H. M. & R. M. Jones, on Premier.

Champion Mare—Earl M. Dixon, on Ouilta; reserve, Mrs. Adam Stirling, on Queen of Flett.

Stallion and Three Mares—First, Mrs. Adam Stirling; second, Earl M. Dixon; third, D. G. Welty; fourth, F. H. Divan & Son.

HACKNEY PONIES AND OTHERS.

EXHIBITORS—George A. Heyl, Washington, Illinois; Mrs. Adam Stirling, Des Moines; A. E. Warren, Des Moines.

JUDGE..................................W. J. KENNEDY, Sioux City, Iowa.

Stallion Four Years or Over—First, Mrs. Adam Stirling, on Lammermoor King; second, George A. Heyl, on Dilhampton, 1470.

Mare Four Years and Over—First, George A. Heyl, on Rougham Madget, 3239; second, George A. Heyl, on Dinarth Magic, 2894; third, Geo. A. Heyl, on Dinarth Mermaid, 3244.

Mare Three Years, Under Four—First, George A. Heyl, on Rougham Daylight, 3237.

Mare Two Years, Under Three—First, Geo. A. Heyl.

Champion Stallion—Mrs. Adam Stirling, on Lammermoor King; reserve, George A. Heyl.

Champion Mare—Geo. A. Heyl on Rougham Madget, 3239; reserve, George A. Heyl.

PONIES IN HARNESS.

EXHIBITORS—Frank Brideson, Bayard; George Brideson, Panora; F. H. Divan & Son, Monroe, Wisconsin; Earl M. Dixon, New Boston, Illinois; H. F. Griffin, Riverside; George A. Heyl, Washington, Illinois; Mrs. Adam Stirling, Des Moines; J. C. Thompson, Perry; A. E. Warren, Des Moines; D. G. Welty, Nevada; F. R. Wilson, Colo.

Pony Under 10½ Hands—First, Earl M. Dixon on Suzanna; second, F. H. Divan & Son, on Prefection Larigo; third, Mrs. Adam Stirling, on Faultless, 14459; fourth, D. G. Welty, on Prisilla, 12804.

Pair Ponies Under 10½ Hands—First, F. H. Divan; second, Mrs. Adam Stirling; third, D. G. Welty; fourth, Earl M. Dixon.

Pony 10½ to 11½ Hands—First, D. G. Welty, on Locust J., 16600; second, Earl M. Dixon; third, Mrs. Adam Stirling; fourth, Mrs. Adam Stirling.

Pair Ponies 10½ to 11½ Hands—First, Mrs. Adam Stirling; second, D. G. Welty; third, F. H. Divan & Son; fourth, Earl M. Dixon.

Pony 11½ to 12½ Hands—First, Earl M. Dixon; second, George A. Heyl, on King Cole; third, Earl M. Dixon; fourth, Mrs. Adam Stirling.

Pair Ponies 11½ to 12½ Hands—First, Geo. A. Heyl; second, Earl M. Dixon; third, Mrs. Adam Stirling; fourth, A. E. Warren.

Pony 12½ to 13½ Hands—First, George A. Heyl, on Glenavon Torch; second, Geo. A. Heyl, on Dilhampton; third, Earl M. Dixon; fourth, Earl M. Dixon.

Pair Ponies 12½ to 13½ Hands—First, Geo. A. Heyl; second, Earl M. Dixon.

Pony 13½ to 14½ Hands—First, Geo. A. Heyl, on Dinarth Magic; second, Mrs. Adam Stirling; third, George A. Heyl, on Rougham Nightlight.

Pair Ponies 13½ to 14½ Hands—First, Geo. A. Heyl.

Tandem Team, Under 12½ Hands—First, Geo. A. Heyl; second, Earl M. Dixon; third, D. G. Welty; fourth, Mrs. Adam Stirling.

Tandem Team Over 12½ Hands—First, Geo. A. Heyl; second, Earl M. Dixon.

Four-in-Hand, Under 12½ Hands—First, Geo. A. Heyl; second, Mrs. Adam Stirling; third, D. G. Welty; fourth, Earl M. Dixon.

Four-in-Hand, Over 12½ Hands—First, Geo. A. Heyl; second, Earl M. Dixon.

Champion Harness Pony—Earl M. Dixon, on Model; reserve, Geo. A. Heyl, on Glynavon Torch.

Champion Pair Harness Ponies—Geo. A. Heyl; reserve, Mrs. Adam Stirling.

PONIES UNDER SADDLE.

EXHIBITORS—Frank Brideson, Bayard; George Brideson, Panora; F. H. Divan, Monroe, Wisconsin; Earl M. Dixon, New Boston, Illinois; H. F. Griffin, Riverside; George A. Heyl, Washington, Illinois; Mrs. Harry B. Kinnard, Des Moines; Mrs. Adam Stirling, Des Moines; A. E. Warren, Des Moines; D. G. Welty, Nevada; F. R. Wilson, Colo.

Saddle Pony Under 10½ Hands—First, Mrs. Adam Stirling, on Queen; second, Mrs. Adam Stirling, on Blackbird; third, Mrs. Harry B. Kinnard, on Dimples; fourth, F. R. Wilson, on Dollie Dimple H-17514.

Saddle Pony 10½ to 11½ Hands—First, D. G. Welty; second, D. G. Welty; third, Mrs. Adam Stirling.

Saddle Pony 11½ to 12½ Hands—First, Geo. A. Heyl, on Gwindy Flashlight, 778; second, Mrs. Adam Stirling; third, A. E. Warren.

Saddle Pony 12½ to 13½ Hands—First, Mrs. Adam Stirling; second, George A. Heyl, on Tazwell Trim, 2877.

Saddle Pony 13½ to 14½ Hands—First, Mrs. Adam Stirling; second, George A. Heyl.

Champion Saddle Pony—Geo. A. Heyl, on Gwindy Flashlight; reserve, D. G. Welty, on Orries Best.

MULES.

Exhibitors—Wyatt Carr & Son, Collins; F. L. Hutson & Son, State Center; Carroll McKibbon, Earlham; Frank A. Miller, Carlisle.

Judge..............................J. F. Roelefson, Maryville, Mo.

Mule Four Years or Over—First, F. L. Hutson & Son; second, Wyatt Carr & Son; third, F. L. Hutson & Son.

Mule Over Three, Under Four—First, F. L. Hutson & Son; second, Wyatt Carr & Son; third, Wyatt Carr & Son.

Mule Over Two, Under Three—First, F. L. Hutson & Son; second, F. L. Huston & Son; third, Wyatt Carr & Son.

Mule Over One, Under Two—First, Frank A. Miller; second, F. L. Hutson & Son; third, Carroll McKibbon.

CHAMPION PAIR MULES
Wyatt Carr & Son, Collins, Iowa.

Mule Colt Under One Year—First, Carroll McKibbon; second, Carroll McKibbon; third, Carroll McKibbon.

Mule Over Fifteen Hands—First, F. L. Hutson & Son; second, F. L. Hutson & Son; third, Wyatt Carr & Son.

Mule Under Fifteen Hands—First, F. L. Hutson & Son; second, F. L. Hutson & Son; third, Wyatt Carr & Son.

Pair Mules Over 2400 Pounds to be Shown in Harness—First, Wyatt Carr & Son; second, F. L. Hutson & Son; third, Wyatt Carr & Son.

Pair Mules Under 2400 Pounds to be Shown in Harness—First, Wyatt Carr & Son; second, F. L. Hutson & Son.

Tandem Team—Conformation, Quality, Manners and Hitch Considered—First, Wyatt Carr & Son.

Four Mule Team—Conformation, Quality, Manners and Hitch Considered—First, Wyatt Carr & Son; second, F. L. Hutson & Son.

Five Mules, Any Age—First, F. L. Hutson & Son; second, Wyatt Carr & Son; third, F. L. Hutson & Son.

Champion Mule, Any Age—F. L. Hutson & Son; reserve, F. L. Hutson & Son.

Champion Pair of Mules, Any Age—Wyatt Carr & Son; reserve, F. L. Hutson & Son.

JACKS AND JENNETS.

Exhibitors—Wyatt Carr & Son, Collins; Robert Cato, Farragut; Carroll McKibbon, Earlham.

Jack Four Years Old or Over—First, Robt. Cato; second, Wyatt Carr & Son; third, Carroll McKibbon.

Jack Three Years Old and Under Four—First, Wyatt Carr & Son; second, Carroll McKibbon.

Jack Two Years Old and Under Three—First, Carroll McKibbon.

Jack and Four Mule Colts, Any Age, Uniformity to be Considered—First, Carroll McKibbon.

Champion Jack—Robert Cato.

STABLE MANAGERS PRIZE.

HORSES.

No first prize awarded; second, A. L. Champlin, Ames, Iowa; third, George A. Heyl, Washington, Illinois; fourth, R. L. Davis, Kansas City, Missouri.

PONY.

First, Earl M. Dixon, New Boston, Illinois; second, Mrs. Adam Stirling, Des Moines, Iowa; third, George A. Heyl, Washington, Illinois; fourth, D. G. Welty, Nevada, Iowa.

BEST STABLE DECORATION.

HORSES.

First, B. R. Pemberton; second, Wilson & Co., Chicago, Illinois; third, Lefebure Sons Co., Fairfield, Iowa; fourth, Trumans' Pioneer Stud Farm, Bushnell, Illinois; fifth, Dunhams, Wayne, Illinois; sixth, J. O. Singmaster & Son, Keota, Iowa.

PONY.

First, Earl M. Dixon, New Boston, Illinois; second, Mrs. Adam Stirling, Des Moines, Iowa; third, F. H. Divan & Son, Monroe, Wisconsin; fourth, H. M. & R. M. Jones, Des Moines, Iowa; fifth, J. C. Thompson, Perry, Iowa.

CATTLE DEPARTMENT

Superintendent.................................H. L. Pike, Whiting, Ia.

SHORTHORNS.

Exhibitors—W. C. Anderson, Norwalk; Burt Brown, Adel; F. C. Barber & Sons, Skidmore, Missouri; Bacon, Darwin & Kepple, Nashua; G. H. Burge, Mount Vernon; Bray & Jackson, Grinnell; Chester Bayar, Farmington; Harold Brayar, Farmington; Cahill Bros., Rockford; J. R. Colville & Sons, Oskaloosa; Will Carrier, Newton; Claverburn Farm, Colo; J. W. Dugan & Sons, Kingsley;

Donald W. Preston, Clio; Ewing Bros., Morrisville, Missouri; George Eggert, Newton; A. R. Fennern, Avoca; W. A. Forsythe & Sons, Greenwood, Missouri; W. A. Graham & Sons, Prairie City; Wm. Herkelman, Elmwood; E. B. Hoyman, Clarence; Krizer Bros., Eddyville; King & Plager, Grundy Center; Raymond F Knapp, Farmington; Dwight Knapp, Farmington; Eugene Kelly, Farmington; Loveland Stock Farm, Mt. Pleasant; Miller & Peterson, Memphis, Missouri; J. E. Mann, Woodbine; Joseph Miller & Sons, Granger, Missouri; J. W. McDermott, Kahoka, Missouri; McCone Bros., Redfield, South Dakota; W. E. Pritchard, Walnut; B. E. Peterson, Nashua; H. Rees & Sons, Pilger, Nebraska; Ransier & Seid, Independence; Francis Ross, Farmington; Clifford Tague, Kirkman; W. B. Tague, Kirkman; Uppermill Farm, Wapello; R. E. Watts & Sons, Miles; Russel Woods, Farmington; Zobel Bros., Dysart.

JUDGE........................T. E. ROBSON, London, Ontario, Canada.

Bull Three Years or Over—First, H. Rees & Sons, on Violets Dale, 424602; second, Bray & Jackson, on Dale Cumberland, 487928; third, Bert Brown, on Royal Radium, 558137; fourth, Zobel Bros., on West Lawn Elect, 455685; fifth, F. C. Barber & Sons, on Village Perfection, 555790; sixth, W. C. Anderson, on Irvinedale Ideal, 541176; seventh, Will Carrier, on Proud Monarch, 422775.

VIOLETS DALE

First Aged Shorthorn Bull, Senior and Grand Champion. Howell Rees & Sons, Pilger, Neb.

Bull Two Years and Under Three—First, W. Preston Donald, on Cumberland Choice, 576192; second, J. W. McDermott, on Cumberland Gift, 575019; third, Wm. Herkelman, on Sultans Model, 558846; fourth, Joseph Miller & Sons, on Royal Archer. .

Bull, Senior Yearling—First, J. W. McDermott, on Cumberland Marshall 14th; second, Loveland Stock Farm, on Sultan Dale, 669846; third, G. H. Burge, on Village Echo, 715438; fourth, Cahill Bros., on Spicy Sultan 2nd, 706383; fifth, Miller & Peterson, on Merry Marquis, 679802; sixth Zobel Bros., on Elect King, 695576.

Bull, Junior Yearling—First, Jos. Miller & Sons, on Pride of Albion, 730697; second, W. Pritchard, on Brilliant Dale; third, H. Rees & Sons, on Marshall Gift, 746219; fourth, Wm. Herkelman, on Cumberlands Choice, 676223;

fifth, H. Rees & Sons, on Victor Dale, 745312; sixth, F. C. Barber & Sons, on Village Emblem, 758890; seventh, Krizer Bros., on Stamps Goods, 766486; eighth, J. R. Colville & Son, on Cumberland Archer, 768321; ninth, Will Carrier, on Royal Velvet, 768838; tenth, Claverburn Farm, on Hallmark's Stamp, 726588.

Bull, Senior Calf—First, and second, Uppermill Farm, on Villager's Rover, and Villager's Cupbearer; third, and seventh, W. E. Pritchard, on Dale's Emblem, and Sedate Dale; fourth, H. Rees & Sons, on Rusper Commander, 788607; fifth, Loveland Stock Farm, on Model Dale; sixth, J. W. McDermott, on Marshall Joffre; eighth, F. C. Barber & Sons, on Village Sigriet, 758891; ninth, Claverburn Farm, on Golden Victor; tenth, Miller & Peterson, on Pride of All, 784457; eleventh, W. E. Graham & Sons, on Royal Major, 803502; twelfth, A. R. Fennern, on Supreme Cumberland, 803264.

Bull, Junior Calf—First, F. C. Barber & Sons, on Bapton Villager, 758880; second, Miller & Peterson, on Pride's Selection; third, H. Rees & Sons, on Royal Dale; fourth, W. E. Pritchard, on Royal Dale; fifth, Joseph Miller & Sons, on Cumberland Stamp; sixth, W. E. Graham & Sons, on Royal Goods, 803501; seventh and twelfth, Claverburn Farm, on King Cumberland 5th, and Sunny Gallant; eighth, A. R. Fennern, on Cumberland's Monarch, 803262; ninth, G. H. Burge; tenth, Wm. Herkelman, on Cumberland's Choice 2nd, 789675; eleventh, Loveland Stock Farm, on Village Gloster.

Cow Three Years or Over—First, Geo. Eggert, on Oaklawns Pride, 204344; second, Claverburn Farm, on Knight's Belle, 189617.

Heifer Two Years and Under Three—First, and ninth, W. Preston Donald, on Clara 71, 598742, and Emma Lou 2, 696571; second, H. Rees & Sons, on Hercules Topsy, 605964; third, Jos. Miller & Sons, on Cumberland Bess 2, 576194; fourth, Loveland Stock Farm, on Jennie Gloster, 652133; fifth, Krizer Bros., on Mildred Dainty 5th, 583760; sixth, seventh and eighth, Zobel Bros., on Choice Alexandrina, 695581, and Gainford Mina, 698143, and Wallflower 4th, 674049; tenth, Will Carrier, on Marshall's Beauty 2, 638854.

Heifer, Senior Yearling—First, Loveland Stock Farm, on Good Music, 737181; second, J. W. Dugan & Sons, on Queen of Weston, 800679; third, F. C. Barber & Sons, on Village Violo, 645085; fourth, Uppermill Farm, on Villager's Lady 7th; fifth and sixth, W. E. Pritchard, on Rosebud 5th, and Fairview Laly 2, 655004; seventh, W. Preston Donald, on Golden Princess, 681856; eighth, H. Rees & Sons, on Clover Meadow Lady, 723481; ninth and tenth, J. W. Dugan & Sons, on Roan Lady 12th, and Gainford's Beauty, 731168.

Heifer, Junior Yearling—First, Uppermill Farm, on Villager's Marigold, 679493; second, Loveland Stock Farm, on Arabella 3, 687224; third, Jos. Miller & Sons, on Cumberland Bess 3, 667935; fourth, H. Rees & Sons, on Cedar Lawn Lady 2; fifth, F. C. Barber & Sons, on Village Emma 10th, 668878; sixth, W. E. Pritchard, on Rosebud 6th, 679498; seventh, Wm. Herkelmann, on Village Beauty 4th, 676013; eighth, Krizer Bros., on Bonnie Girl, 721016; ninth, J. W. Dugan & Sons, on Lois Marquis, 742233; tenth, Miller & Peterson, on Pride's Violet, 784458; eleventh, King & Plager, on Fair Midassa, 708513; twelfth, W. C. Anderson, on Lady Sorrel, 788384.

Heifer, Senior Calf—First, E. B. Hoyman, on Silver Mist 2, 765344; second, Jos. Miller & Sons, on Miss Cumberland; third, W. E. Pritchard, on Geraldine 10th; fourth, W. E. Graham & Sons, on Madam Clemintina, 803507; fifth, Uppermill Farm, on Villager's Lady 8th; sixth, F. C. Barber & Sons, on Perfection's Rose, 758894; seventh, J. E. Mann, on Dainty Dorothy, 756775; eighth, J. E. Mann, on Fair Sultana, 756776; ninth, H. Rees & Sons, on Star's Fancy; tenth, Geo. Eggert, on British Maid; eleventh, Cahill Bros., on Lady Myra 8th; twelfth, Loveland Stock Farm, on Lily Crown.

Heifer, Junior Calf—First, and eighth, Jos. Miller & Sons, on Lady Cumberland 2, and Cumberland Queen; second, J. W. McDermott, on Golden Queen; third, W. Preston Donald, on Dlanod Rosewood 2, 804052; fourth, W. E. Pritchard, on Diamond 40th; fifth, F. C. Barber & Sons, on Village Violet 2nd, 758905; sixth, H. Rees & Sons, on Dales Gladness; seventh, W. E. Pritchard, on Fairview Lily 3; ninth, Claverburn Farm, on Claverburn

Belle; tenth, Wm. Herkelmann, on Cumberland's Flower, 789683; eleventh, Bray & Jackson, on Wedding Gift 38th; twelfth, W. E. Graham & Sons, on Royal Bess, 803511.

Champion Bull Two Years Old or Over—H. Rees & Sons, on Violets Dale, 424602.

Champion Bull Under Two Years Old—Uppermill Farm, on Villager's Rover.

Champion Cow Two Years Old or Over—W. Preston Donald, on Clara 71st, 598742.

Champion Heifer Under Two Years Old—Loveland Stock Farm, on Good Music, 737181.

CLARA 71ST

Senior and Grand Champion Shorthorn Cow. W. Preston Donald, Clio, Iowa.

Grand Champion Bull Any Age—H. Rees & Sons, on Violets Dale, 424602.

Grand Champion Cow or Heifer, Any age—W. Preston Donald, on Clara 71st, 598742.

Graded Herd—First, H. Rees & Sons; second, W. Preston Donald; third, Jos. Miller & Sons; fourth, Zobel Bros.; fifth, Will Carrier.

Breeders' Young Herd—First, Uppermill Farm; second, W. E. Pritchard; third, H. Rees & Sons; fourth, Jos. Miller & Sons; fifth, Wm. Herkelmann; sixth, G. H. Burge; seventh, F. C. Barber & Sons; eighth, Geo. Eggert.

Breeders' Calf Herd—First, Uppermill Farm; second, W. E. Pritchard; third, Loveland Stock Farm; fourth, J. W. McDermott; fifth, Jos. Miller & Sons; sixth, H. Rees & Sons; seventh, W. E. Graham & Sons; eighth, Geo. Eggert.

Get of Sire—First, Uppermill Farm; second, Jos. Miller & Sons; third, W. E. Pritchard; fourth, H. Rees & Sons; fifth, Wm. Herkelmann; sixth, F. C. Barber & Sons; seventh, Miller & Peterson; eighth, Loveland Stock Farm.

Produce of Cow—First, J. W. McDermott, second, Uppermill Farm: third, W. E. Pritchard; fourth, Jos. Miller & Sons; fifth, Wm. Herkelmann; sixth, Will Carrier; seventh, W. E. Pritchard.

IOWA SPECIALS.

Bull Three Years or Over—First, Bray & Jackson, on Dale Cumberland, 487928; second, Bert Brown, on Royal Radium, 558137; third, Zobel Bros., on West Lawn Elect, 455685; fourth, W. C. Anderson, on Irvinedale Ideal, 541176; fifth, Will Carrier, on Proud Monarch, 422775.

Bull Two Years, Under Three—First, W. Preston Donald, on Cumberland's Choice, 576192; second, Wm. Herkelmann, on Sultan's Model, 558846.

Bull, Senior Yearling—First, Loveland Stock Farm, on Sultan Dale, 669846; second, G. H. Burge, on Village Echo, 715438; third, Cahill Bros., on Spicy Sultan 2nd, 706383; fourth, Zobel Bros., on Elect King, 695576.

Bull, Junior Yearling—First, W. E. Pritchard, on Brilliant Dale; second, Wm. Herkelmann, on Cumberland's Choice, 676223; third, Krizer Bros., on Stamp's Goods, 766486; fourth, J. R. Colville & Sons, on Cumberland Archer, 758320; fifth, Will Carrier, on Royal Velvet, 768838; sixth, Claverburn Farm, on Hallmark's Stamp, 726588.

Bull, Senior Calf—First and second, Uppermill Farm, on Villager's Rover, and Villager's Cupbearer; third, W. E. Pritchard, on Dale's Emblem; fourth, Loveland Stock Farm, on Model Dale; fifth, W. E. Pritchard, on Sedate Dale, sixth, Claverburn Farm, on Golden Victor.

Bull, Junior Calf—First, W. E. Pritchard; second, W. E. Graham & Sons, on Royal Goods, 803501; third, Claverburn Farm, on King Cumberland 5th; fourth, A. R. Fennern, on Cumberland's Monarch, 803262; fifth, G. H. Burge, on Welcome of Wayside; sixth, Wm. Herkelmann, on Cumberland's Choice 2nd, 789675.

Cow Three Years or Over—First, Geo. Eggert, on Oaklawn's Pride, 204344; second, Claverburn Farm, on Knight's Belle, 189617.

Heifer Two Years, Under Three—First, W. Preston Donald, on Clara 71st, 598742; second, Loveland Stock Farm, on Jennie Gloster, 652133; third, Krizer Bros., on Mildred Dainty 5th, 583760; fourth, fifth and sixth, Zobel Bros., on Choice Alexandrina, 695581, and Gainford Mina, 698143, and Wallflower, 674049.

Heifer, Senior Yearling—First, Loveland Stock Farm, on Good Music, 737181; second, J. W. Dugan & Sons, on Queen of Weston, 800679; third, Uppermill Farm, on Villager's Lady 7th; fourth and fifth, W. E. Pritchard, on Rosebud 5th, 655005, and Fairview Lily 2nd, 655004; sixth, W. Preston Donald, on Golden Princess, 681856.

Heifer, Junior Yearling—First, Uppermill Farm, on Villagers Marigold, 679493; second, Loveland Stock Farm, on Arabella 3rd, 687224; third, W. E. Pritchard, on Rosebud 6th, 679498; fourth, Wm. Herkelmann, on Village Beauty 4th, 676013; fifth, Krizer Bros., on Bonnie Girl, 721016; sixth, J. W. Dugan & Sons, on Lois Marquis, 742233.

Heifer, Senior Calf—First, E. B. Hoyman, on Silver Mist 2nd, 765344; second, W. E. Pritchard, on Geraldine 10th, third, W. E. Graham & Sons, on Madam Clementina, 803507; fourth, Uppermill Farm, on Villager's Lady 8th; fifth and sixth, J. E. Mann, on Dainty Dorothy, 756775, and Fair Sultan, 756776.

Heifer, Junior Calf—First, W. Preston Donald, on Dlanod Rosewood 2nd, 804052; second and third, W. E. Pritchard, on Diamond 40th, and Fairview Lily 3; fourth, Claverburn Farm, on Claverburn Belle; fifth, Wm. Herkelmann, on Cumberland's Flower, 789683; sixth, Bray & Jackson, on Wedding Gift 38th.

Graded Herd—First, W. Preston Donald; second, Zobel Bros.; third, Will Carrier.

Breeders' Young Herd—First, Uppermill Farm; second, W. E. Pritchard; third, Wm. Herkelmann; fourth, G. H. Burge; fifth, Geo. Eggert.

Breeders' Calf Herd—First, Uppermill Farm; second, W. E. Pritchard; third, Loveland Stock Farm; fourth, W. E. Graham & Sons; fifth, Geo. Eggert; sixth, Wm. Herkelmann.

Get of Sire—First, Uppermill Farm; second, W. E. Pritchard; third, Wm. Herkelmann; fourth, Loveland Stock Farm; fifth, W. E. Graham & Sons; sixth, G. H. Burge.

Produce of Cow—First, Uppermill Farm; second, W. E. Pritchard; third, Wm. Herkelmann; fourth, Will Carrier; fifth, W. E. Pritchard; sixth, Loveland Stock Farm.

IOWA AMATEUR SHORTHORNS.

EXHIBITORS—Chester Bayer, Farmington; Harold Bayer, Farmington; Will Carrier, Newton; J. R. Colville & Sons, Oskaloosa; J. W. Dugan & Son, Kingsley; W. Preston Donald, Clio; George Eggert, Newton; A. R. Finnern, Avoca; Howard Huff, Hillsboro; Eugene Kelley, Farmington; King & Plager, Grundy Center; Dwight Knapp, Farmington; F. Raymond Knapp, Farmington; Krizer Bros., Eddyville; Gill E. Miller, Bonaparte; Ransier & Seid, Independence; Francis Ross, Farmington; W. A. Tade, Jr., Hillsboro; W. B. Tague, Kirkman; Russell Woods, Farmington; Zobel Bros., Dysart.

JUDGE................................REX BERESFORD, Ames, Iowa.

Bull Two Years, Under Three—First, W. Preston Donald, on Cumberland's Choice, 576192.

Bull, Senior Yearling—First, Zobel Bros., on Elect King, 695576.

Bull, Junior Yearling—First, Will Carrier, on Royal Velvet, 768838; second, Zobel Bros., on Sultan's Count, 741801; third, Krizer Bros., on Stamp's Goods, 766486.

Bull, Senior Calf—First, A. R. Fennern, on Supreme Cumberland, 803264; second, George Eggert, on British Favorite; third, Krizer Bros., on Stamp's Robin, 766487; fourth, J. W. Dugan & Sons, on Broadhook's Choice, 800673; fifth, W. Preston Donald, on Dale's Victor, 804051; sixth, Krizer Bros., on British Emblem, 766487.

Bull, Junior Calf—First, A. R. Fennern, on Cumberland's Monarch, 803262; second, J. W. Dugan & Sons, on Gainford's Clipper, 792733; third, Zobel Bros., on Luster's Elect.

Heifer Two Years, Under Three—First, W. Preston Donald, on Clara 71st, 598742; second, Krizer Bros., on Mildred Dainty 5th, 583760; third, W. Preston Donald, on Emma Lou 2nd, 696571; fourth, Zobel Bros., on Wallflower 4th, 674049; fifth, Zobel Bros., on Gainford Mina, 698143; sixth, Zobel Bros., on Choice Alexandrina, 695581.

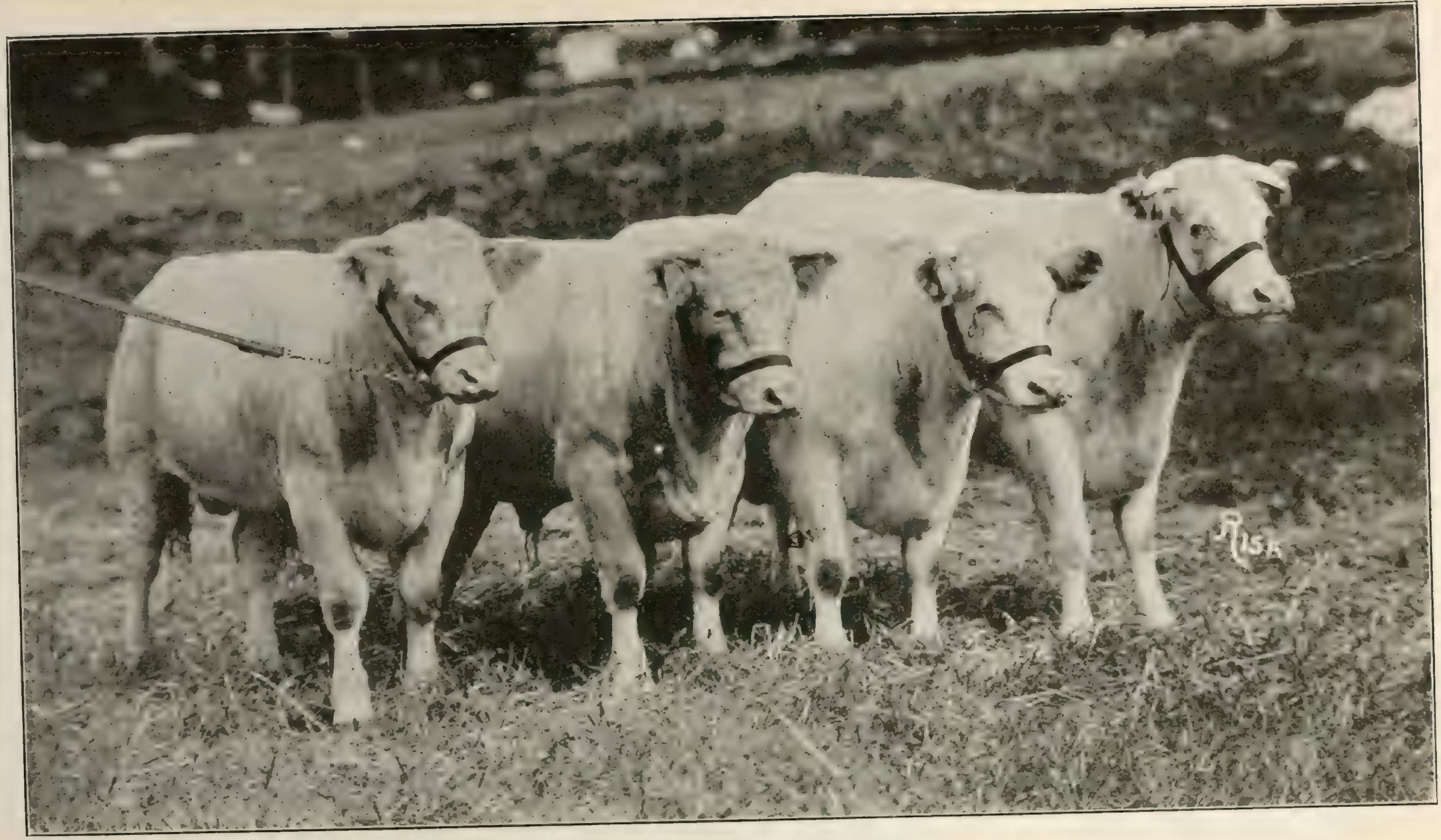
Heifer, Senior Yearling—First, J. W. Dugan & Sons, on Queen of Weston, 800679; second, W. Preston Donald, on Golden Princess, 681856; third, J. W. Dugan & Sons, on Roan Lady 12th, 800680; fourth, Krizer Bros., on Mildred Lavender, 695346; fifth, J. W. Dugan & Sons, on Gainfords Beauty, 731168; sixth, Zobel Bros., on Golden Wreath Rose, 706704.

Heifer, Junior Yearling—First, J. W. Dugan & Sons, on Lois Marquis, 742233; second, W. Preston Donald, on Clara 68th, 706231; third, Krizer Bros., on Bonnie Girl, 721016; fourth, Krizer Bros., on Proud Katie 4th, 646415; fifth, King & Plager, on Fair Midassa, 708513; sixth, Zobel Bros., on Lavender Roan Queen, 758085.

Heifer, Senior Calf—First, George Eggert, on British Maid; second, E. B. Hoyman, on Silver Mist 2nd, 765344; third, W. B. Tague, on Snowflakes Gem, 746695; fourth, Krizer Bros., on Broadhook Mildred, 778915; fifth, George Eggert, on Shady Blink 2nd; sixth, J. W. Dugan & Sons, on Gainford's Daisy, 792741.

Heifer, Junior Calf—First, W. Preston Donald, on Dlanod Rosewood 2nd, 804502; second, Krizer Bros., on Mildred Lavender 5th, 778917; third, W. Preston Donald, on Orange Miss 6th, 804054; fourth, Bray & Jackson; fifth, Bray & Jackson.

County Group, to Consist of Four Animals, Any Age or Sex From Same County—First, W. Preston Donald; second, J. W. Dugan & Sons; third, George Eggert.



FIRST PRIZE SHORTHORN GET OF SIRE.
Weaver & Garden, Uppermill Farm, Wapello, Iowa.

SPECIAL PRIZES FOR AMATEURS OFFERED BY THE AMERICAN SHORTHORN BREEDERS' ASSOCIATION.

Best Bull Calf—F. C. Barber & Sons, on Bapton Villager, 758880.

Best Heifer Calf—E. B. Hoyman, on Silver Mist 2nd, 765344.

SPECIAL PREMIUMS OFFERED BY THE IOWA SHORTHORN BREEDERS' ASSOCIATION.

Best Senior Bull Calf—Uppermill Farm, on Villager's Rover.

Best Junior Bull Calf—F. C. Barber & Sons, on Bapton Vilager, 758880.

Best Senior Heifer Calf—E. B. Hoyman, on Silver Mist 2nd.

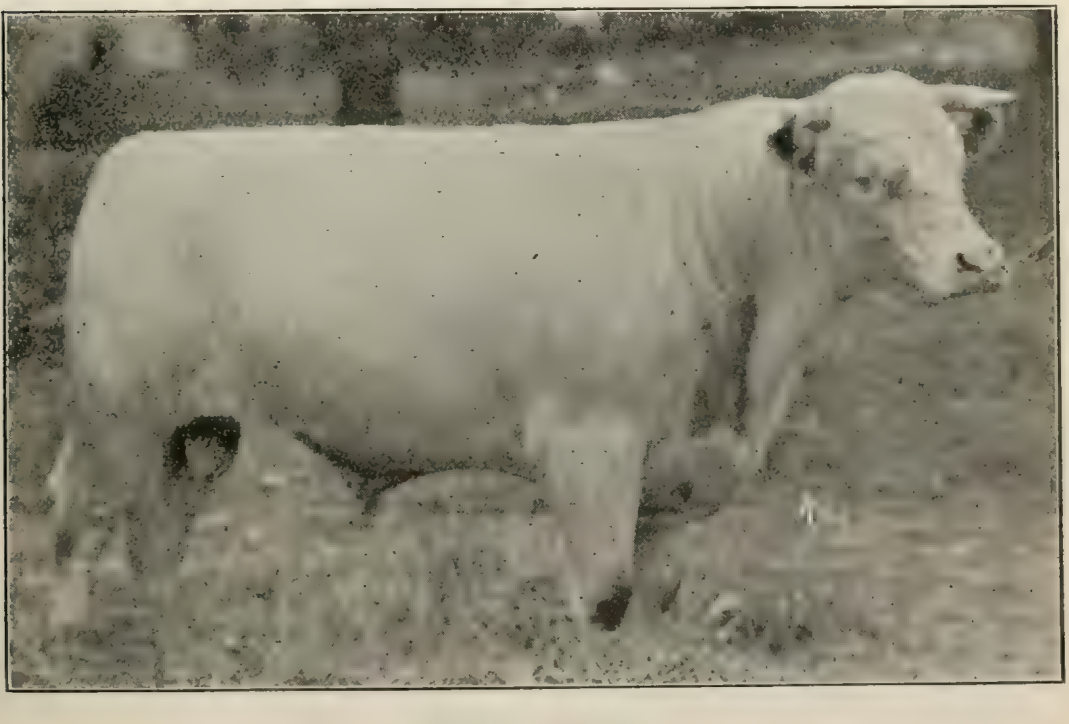
Best Junior Heifer Calf—Joseph Miller & Son, on Lady Cumberland 2.

MILKING SHORTHORNS.

JUDGE........................ELLIOTT DAVIS, Holbrook, Nebraska.

EXHIBITORS—R. R. Clampitt, New Providence; Finlay McMartin & Sons, Claremont, Minnesota.

Bull Two Years, Under Three—First, R. R. Clampitt, on White Prince, 648027; second, Finlay McMartin & Sons, on Welfare Champion, 601675.



WHITE PRINCE
Grand Champion Milking Shorthorn Bull. R. R. Clampitt, New Providence, Iowa.

Bull One Year, Under Two—First R. R. Clampitt, on Dales Knight, 753419.

Bull Under One Year—First, Finlay McMartin & Sons, on Woodburn Prince 2d.

Cow Five Years or Over—First, Finlay McMartin & Sons on Pride of Beauty, 169072; second, Finlay McMartin & Sons on Roan Lily, 205551.

Cow Three Years, Under Five—First, Finlay McMartin & Sons, on Snowdrop, 573084; second and third, R. R. Clampitt, on Ellen Dale, 245003, and Beau's Belle 2nd, 562692.

Cow Two Years, Under Three—First, Finlay McMartin & Sons, on Dulcibella 5th, 604675; second, R. R. Clampitt, on Fair Dale, 678543.

Heifer, Senior Yearling—First, Finlay McMartin & Sons, on Beatrice 2nd, 696867.

Heifer, Junior Yearling—First and second, Finlay McMartin & Sons, on Belles Bud 2nd, 767908, and Lucy 18th, 731894.

Heifer, Senior Calf—First, Finlay McMartin & Sons, on White Lassie.

Heifer, Junior Calf—First, R. R. Clampitt, on Young Duchess 8th; second, Finlay McMartin & Sons, on Woodburn Beauty 2nd.

Senior Champion Bull—R. R. Clampitt, on White Prince, 648027.

Junior Champion Bull—R. R. Clampitt, on Dales Knight, 753419.

Senior Champion Cow—Finlay McMartin & Sons, on Snow Drop, 573084.

Junior Champion Heifer—Finlay McMartin & Sons, on White Lassie.

Grand Champion Bull—R. R. Clampitt, on Dales Knight, 753419.

Grand Champion Cow or Heifer—Finlay McMartin & Sons, on Snowdrop, 573084.

Graded Herd—First, Finlay McMartin & Sons.

Young Herd—First Finlay McMartin & Sons.

Calf Herd—First, Finlay McMartin & Sons.

Get of Sire—First, Finlay McMartin & Sons.

Produce of Cow—First, Finlay McMartin & Sons; second, R. R. Clampitt.

HEREFORDS.

Exhibitors—M. Armentrout, Botna; M. W. Beatty, Valley Junction; W. J. W. Blayney, Denver, Colorado; P. M. Christenson, Lone Rock; E. M. Cassady & Sons, Whiting; R. F. Dougherty, Independence; Jesse Engle & Sons, Sheridan, Missouri; Enochs & Wortman, Jackson, Mississippi; O. Harris & Sons, Harris, Missouri; Robt. H. Hazlett, El Dorado, Kansas; N. D. Pike, Weatherford, Oklahoma; J. C. Robinson & Son, Evansville, Wisconsin; Henry Schnoor & Son, Perry; S. H. Velie, Blue Springs, Missouri; Wiese Bros., Manning; Wm. B. Wilson, Garrison; Walter L. Yost, Kansas City, Missouri.

Judge..............................J. H. Van Natta, La Fayette, Ind.

Bull Three Years Old and Over—First, O. Harris & Sons, on Repeater Junior, 696352; second, W. L. Yost, on Avonmore, 700001; third, W. L. Yost, on Braemore, 666666; fourth, J. C. Robinson & Son, on Beau Welcome, 566409; fifth, N. D. Pike, on Bristol Fairfax, 512876; sixth, R. F. Dougherty, on Highland Prince, 795961; seventh, P. M. Christenson, on Misty Brae, 422352.

Bull Two Years and Under Three—First, S. H. Velie, on Kenilworth, 777770; second, O. Harris & Sons, on Repeater 19th, 618940; third, J. C. Robinson & Son, on Maples Lad 97th, 642612; fourth, Robt. H. Hazlett, on Robert Dare, 616076; fifth, N. D. Pike, on Hero H. 702d, 640023; sixth, W. L. Yost, on Beau Franklin 9th, 617283; seventh, Wm. B. Wilson, on March Ion, 638789.

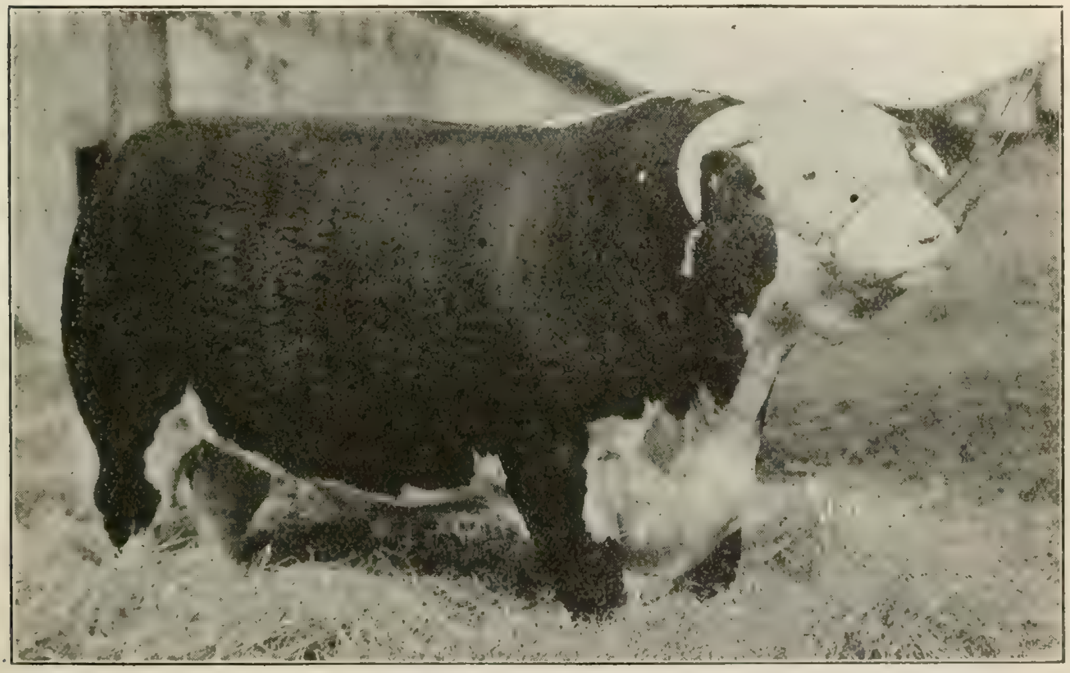
Bull, Senior Yearling—First, W. L. Yost, on Beau Graphic, 694179; second, J. C. Robinson & Son, on Maple's Lad 117th, 696980.

Bull, Junior Yearling—First, O. Harris & Sons, on Repeater 212nd, 700845; second, W. J. W. Blayney, on Wyoming's Image, 741457; third, Robert H. Hazlett, on Bocaldo 17th, 685018; fourth, E. M. Cassady & Son, on Golden Lad 2nd, 700118; fifth, Robert H. Hazlett, on Bocaldo 19th, 720834; sixth, J. C. Robinson & Son, on Maple's Lad 121st, 696985; seventh, J. C. Robinson & Son, on Maple's Lad 127th, 746239; eighth, S. H. Velie, on Bocaldo 25th; ninth, M. Armentrout, on Young Imperial, 798880; tenth, P. M. Christenson, on Germination 32nd, 760757.

Bull, Senior Calf—First, W. L. Yost, on Model Brae, 790717; second, W. J. W. Blayney, on Wyoming 9th, 775406; third, O. Harris & Son, on Repeater 171st, 763764; fourth, Robert H. Hazlett, on Hazford, Bocaldo 3rd, 786771; fifth, Robert H. Hazlett, on Publican 12th, 786807; sixth, W. J. W. Blayney, on Wyoming 8th, 775405; seventh, S. H. Velie, on Masterpiece 3rd, 775401; eighth, Jesse Engle & Sons, on Beau Blanchard 87th, 787275; ninth, Jesse Engle & Sons, on Beau Blanchard 86th, 787286; tenth, E. M. Cassady & Sons, on Bright Comet 2nd, 768261.

Bull, Junior Calf—First, Jesse Engle & Sons, on Beau Blanchard 90th, 787270; second, O. Harris & Sons, on Repeater 184th, 792561; third, W. L. Yost, on Commander, 790703; fourth, S. H. Velie, on Prince Warwick, 786844; fifth, W. L. Yost, on Avalanche, 790693; sixth, J. C. Robinson & Son, on Maple's Lad 133rd, 788366; seventh, O. Harris & Sons, on Repeater 179th, 792577; eighth, Robert H. Hazlett, Publican 20th, 786815; ninth, M. Armentrout, on Junior Mischief 4th, 801255; tenth, R. F. Dougherty, on Highland Prince Jr., 803218.

Cow Three Years or Over—First, Robert H. Hazlett, on Yerba Santa, 544948; second, J. C. Robinson & Son, on Maple's Lass 68th, 513771; third, W. L. Yost, on Maple's Lass 82nd, 567930; fourth, O. Harris & Sons, on Miss Gay Lad 42nd, 561597; fifth, O. Harris & Sons, on Miss Repeater 75th, 561600; sixth, M. Armentrout, on Helen Mischief, 591876; seventh, N. D. Pike, on Baby Britian, 567843; eighth, P. M. Christenson, on Beauty 2nd, 612909; ninth, Wm. B. Wilson, on Maiden Blush, 495024.



REPEATER JR.

Senior and Grand Champion Hereford Bull. O. Harris & Sons, Harris, Mo.

Heifer Two Years and Under Three—First, Robt. H. Hazlett, on Bloss 16th, 605513; second, W. L. Yost, on Bonnie Easter, 616133; third, Jesse Engle & Sons, on Bell Blanchard 61st, 623129; fourth, W. J. W. Blayney, on Colorado Lassie, 690731; fifth, O. Harris & Sons, on Miss Repeater 109th, 618918; sixth, E. M. Cassady & Son, on Lily Stanway, 699128; seventh, O. Harris & Sons, on Miss Perfection 18th, 607149; eighth, W. L. Yost, on Lady Aster, 677010; ninth, S. H. Velie, on Rebe Velie, 620790; tenth, J. C. Robinson & Son, on Maple's Lass 103rd, 642629.

Heifer, Senior Yearling—First, W. J. W. Blayney, on Bonnie Wyoming, 695718; second, W. L. Yost, on Bonnie Gondola, 694184; third, Jesse Engle & Sons, on Belle Blanchard 63rd, 685477; fourth, Robt. H. Hazlett, on Buleen

3rd, 685020; fifth, O. Harris & Sons, on Miss Repeater 141st, 690635; sixth, S. H. Velie, on Merce Velie, 687880; seventh, M. Armentrout, on Mischief Maker 6th, 681567; eighth, J. C. Robinson & Son, on Maples Lass 104th, 696987; ninth, W. L. Yost, on Bonnie Blessing 2nd, 671998; tenth, M. Armentrout, on Lady Fair 2nd, 688479.

Heifer, Junior Yearling—First, W. L. Yost, on Donna Woodford 5th, 694193; second, S. H. Velie, on Zola Velie, 693202; third, O. Harris & Sons, on Miss Repeater 155th, 700818; fourth, Robt. H. Hazlett, on Bocaldo Beauty, 720837; fifth, E. M. Cassady & Son, on Bright Lady 2nd, 700107; sixth, M. Armentrout, on Jessie Mischief, 694525; seventh, Jesse Engle & Sons, on Bell Blanchard 73rd, 723773; eighth, M. Armentrout, on Princess Domino, 716898; ninth, W. J. W. Blayney, on Miss Wyoming, 741451; tenth O. Harris & Sons, on Miss Repeater 152nd, 700815.

Heifer, Senior Calf—First, O. Harris & Sons, on Miss Repeater 161st, 763755; second, W. L. Yost, on Bonnie Dorana, 790696; third, Jesse Engle & Sons, on Belle Blanchard 80th, 787282; fourth, Jesse Engle & Sons; fifth, Robert H. Hazlett, on Donabel 2nd, 786775; sixth, Robert H. Hazlett, on Hazford Lass 6th, 786780; seventh, E. M. Cassady & Sons, on Maude Stanway, 768275; eighth, Jesse Engle & Son, on Belle Blanchard 79th, 787281; ninth, W. L. Yost, on Minnie Avondale, 790716; tenth, J. C. Robinson & Son, on Maples' Lass 124th, 788373.

Heifer, Junior Calf—First, S. H. Velie, on Carmen Velie, 786835; second, J. C. Robinson & Son, on Maple's Lass 129th, 788378; third, M. Armentrout, on Miss Junior Mischief, 801261; fourth, Robert H. Hazlett, on Lady Baltimore 11th, 786795; fifth, W. L. Yost, on Beauty Brae, 790694; sixth, Jesse Engle & Sons, on Belle Blanchard 85th, 787287; seventh, Robt. H. Hazlett, on Lady Ileen 4th, 786803; eighth, O. Harris & Sons, on Miss Donald H. 1st, 794155; ninth, M. Armentrout, on Miss Junior Mischief 2nd, 801262; tenth, O. Harris & Sons, on Miss Repeater 170th, 792552.

Champion Bull Two Years Old or Over—O. Harris & Sons, on Repeater Junior, 696352.

Champion Bull Under Two Years Old—O. Harris & Sons, on Repeater 212th, 700845.

Champion Cow Two Years Old or Over—Robert H. Hazlett, on Yerba Santa, 544948.

Champion Heifer Under Two Years Old—W. L. Yost, on Donna Woodford 5th, 694193.

Grand Champion Bull, Any Age—O. Harris & Sons, on Repeater Junior, 696352.

Grand Champion Cow or Heifer, Any Age—Robert H. Hazlett, on Yerba Santa, 544948.

Graded Herd—First, W. L. Yost; second, Robert H. Hazlett; third, O. Harris & Sons; fourth, J. C. Robinson & Sons; fifth, O. Harris & Sons; sixth, N. D. Pike; seventh, Wm. B. Wilson; eighth, P. M. Christenson.

Breeders' Young Herd—First, W. L. Yost; second, Jesse Engle & Sons; third, Robt. H. Hazlett; fourth, S. H. Velie; fifth, O. Harris & Sons; sixth, E. M. Cassady & Sons; seventh, J. C. Robinson & Son; eighth, N. D. Pike.

Breeders' Calf Herd—First, Jesse Engle & Sons; second, W. L. Yost; third, Robert H. Hazlett; fourth, S. H. Velie; fifth, O. Harris & Sons; sixth, E. M Cassady & Son; seventh, J. C. Robinson & Son; eighth, M. Armentrout.

Get of Sire—First, O. Harris & Son; second, J. C. Robinson & Son; third, O. Harris & Son; fourth, W. J. W. Blayney; fifth, Jesse Engle & Sons; sixth, W. L. Yost; seventh, Robert H. Hazlett; eighth, S. H. Velie.

Produce of Cow—First, O. Harris & Sons; second, W. L. Yost; third, J. C. Robinson & Son; fourth, N. D. Pike; fifth, Wm. B. Wilson.

FIRST PRIZE HEREFORD YOUNG HERD
Jesse Engle & Son, Sheridan, Mo.

IOWA HEREFORD SPECIALS.

Bull Three Years or Over—First, R. F. Dougherty, on Highland Prince, 795961; second, P. M. Christenson, on Misty Brae, 422352.

Bull Two Years, Under Three—First, Wm. B. Wilson, on March Ion, 638789 (11193).

Bull, Junior Yearling—First, E. M. Cassady & Sons, on Golden Lad 2nd, 700118; second, M. Armentrout, on Young Imperial, 798880; third, P. M. Christenson, on Germination 32nd, 760757; fourth, Wm. B. Wilson, on Iowa Man, 758059.

Bull, Senior Calf—First, E. M. Cassady & Sons, on Bright Count 2nd; second, E. M. Cassady & Sons, on Bright Duke, 768262.

Bull, Junior Calf—First, M. Armentrout, on Junior Mischief 4th, 801255; second, R. F. Dougherty, on Highland Prince Jr., 803218; third, M. W. Beatty, on Arthur Princeps, 814933; fourth, Wm. B. Wilson, on Fulfiller.

Cow Three Years or Over—First, M. Armentrout, on Helen Mischief, 591876; second, P. M. Christenson, on Beauty 2nd, 612909; third, Wm. B. Wilson, on Maiden Blush, 495024.

Heifer Two Years, Under Three—First, E. M. Cassady & Sons, on Lily Stanway, 699128; second, M. Armentrout, on Disturber Pet, 601824; third, P. M. Christenson, on Queen Ion, 638791; fourth, Henry Schnoor & Son, on Lady Park Gem, 663133; fifth, Wm. B. Wilson, on Emilene, 626878.

Heifer, Senior Yearling—First, M. Armentrout, on Mischief Maker 6th, 681567; second, M. Armentrout, on Lady Fair 2nd, 688479; third, M. W. Beatty, on Loretta Princeps, 679772; fourth, Henry Schnoor & Son, on Silver Lock, 708881; fifth, P. M. Christenson, on Bonnie Lass, 714078; sixth, Wm. B. Wilson, on Elmira, 711674.

Heifer, Junior Yearling—First, E. M. Cassady & Sons, on Bright Lady 2nd, 700107; second, M. Armentrout, on Jessie Mischief, 694525; third, M. Armentrout, on Princess Domino, 716898; fourth, E. M. Cassady & Sons, on Etta Stanway, 700115; fifth, R. F. Dougherty, on Princess Pat, 706391; sixth, Henry Schnoor & Son, on Ito King 10th, 740413.

Heifer, Senior Calf—First, E. M. Cassady & Sons, on Maude Stanway, 768275; second, E. M. Cassady & Sons, on Bright Simplicity, 768266; third, P. M. Christenson, on Polled Ruperta, 772365.

Heifer, Junior Calf—First, M. Armentrout, on Miss Junior Mischief, 801261; second, M. Armentrout, on Miss Junior Mischief 2nd, 801262; third, E. M. Cassady & Sons, on Perfection Maid, 794517; fourth, R. F. Dougherty, on Lady Highland, 803219; fifth, R. F. Dougherty, on Modesty, 803220; sixth, Wm. B. Wilson, on Iona.

Graded Herd—First, Wm. B. Wilson; second, P. M. Christenson.

Breeders' Young Herd—First, E. M. Cassady & Sons; second, R. F. Dougherty.

Breeders' Calf Herd—First, E. M. Cassady & Sons; second, M. Armentrout; third, R. F. Dougherty.

Get of Sire—First, E. M. Cassady & Sons; second, R. F. Dougherty; third, Wm. B. Wilson.

Produce of Cow—First, Wm. B. Wilson.

IOWA AMATEUR HEREFORDS.

EXHIBITORS—M. Armentrout, Botna; R. F. Dougherty, Independence; Henry Schnoor & Son, Perry Wm. B. Wilson, Garrison.

JUDGE.............................J. H. VAN NATTA, La Fayette, Ind.

Bull Two Years, Under Three—First, Wm. B. Wilson, on March Ion, 638789.

Bull, Junior Yearling—First, M. Armentrout, on Young Imperial, 798880;

second, P. M. Christenson, on Germination 3rd, 760757; third, Wm. B. Wilson, on Iowa Man, 758059.

Bull, Junior Calf—First, M. Armentrout, on Junior Mischief 4th, 801255; second, R. F. Dougherty, on Highland Prince Jr., 803218; third, Wm. B. Wilson, on Fulfiller.

Heifer Two Years, Under Three—First, M. Armentrout, on Disturber Pet, 601824; second, P. M. Christenson, on Queen Ion, 638791; third, Wm. B. Wilson, on Emiline, 626878.

Heifer, Senior Yearling—First, M. Armentrout, on Mischief Maker 6th, 681567; second, M. Armentrout, on Lady Fair 2nd, 688479; third, Wm. B. Wilson, on Elmira, 711674; fourth, P. M. Christenson, on Bonnie Lass, 714078.

Heifer, Junior Yearling—First, M. Armentrout, on Princess Domino, 716898; second, M. Armentrout, on Josie Mischief, 694525; third, R. F. Dougherty, on Princess Pat, 706391; fourth, P. M. Christenson, on Enid, 708347; fifth, R. F. Dougherty, on Jessie Winkfield, 706393; sixth, Wm. B. Wilson, on Nona 711677.

Heifer, Junior Calf—First, P. M. Christenson, on Polled Ruperta 6th, 772365.

Heifer, Junior Calf—First, M. Armentrout, on Miss Junior Mischief, 801261; second, M. Armentrout, on Miss Junior Mischief 2nd, 801262; third, P. M. Christenson, on Misty Beauty, 806533; fourth, R. F. Dougherty, on Lady Highland, 803219; fifth, Wm. B. Wilson, on Iona; sixth, R. F. Dougherty, on Modesty, 803220.

County Group—First, M. Armentrout; second, P. M. Christenson; third, R. F. Dougherty.

ABERDEEN ANGUS.

EXHIBITORS—O. R. Anderson, Whiting; Dr. J. Bisgard, Harlan; R. R. Blake, Waukee; Will Christenson, Lone Rock; Escher & Ryan, Irwin; John H. Fitch, Lake City; R. W. Frank, Renwick; W. J. Galbraith & Sons, Algona; Miles Gardner, Hamlin; Hess & Brown, Waterloo; L. R. Kershaw, Muskogee, Oklahoma; Kemp Bros., Marion; Emery H. Lee, Avoca; R. W. Plummer, Marshalltown; Carl A. Rosenfeld, Kelly; Willow Lawn Farm, Waverly.

JUDGE.................................L. MCWHORTER, Aledo, Illinois.

Bull Three Years or Over—First, L. R. Kershaw, on Plowman, 221051; second, R. W. Plummer, on Black Benz 2nd, 204481; third, Kemp Bros., on Blackdale of Quietdale, 191989; fourth, Dr. J. Bisgard, on Eolian's Marshall, 216315; fifth, John H. Fitch, on Karo F., 211876; sixth, Miles Gardner, on Brownelle Champion, 231187.

Bull Two Years and Under Three—First and fifth, Escher & Ryan, on Bar Marshall, 229185, and Black Marshall 2nd, 229849; second, John H. Fitch, on Quito K., 228600; third, L. R. Kershaw, on Ben Hur 2nd of Lone Dell, 232878; fourth, Carl A. Rosenfeld, on Faultless Pass, 251065.

Bull, Senior Yearling—First, Carl A. Rosenfeld, on Black Cap Clipper 2nd, 254090; second, John H. Fitch, on Koran 2nd, 260090.

Bull, Junior Yearling—First, Hess & Brown, on Blue Blood 2nd, 267193; second. John H. Fitch, on Enticer 2nd, 279270; third, Escher & Ryan, on Prince Marshall, 261280; fourth, Kemp Bros., on Quaker Lad K, 281346; fifth, L. R. Kershaw, on Black Iverne, 268180; sixth, Miles Gardner, on Englewood 2nd, 272175.

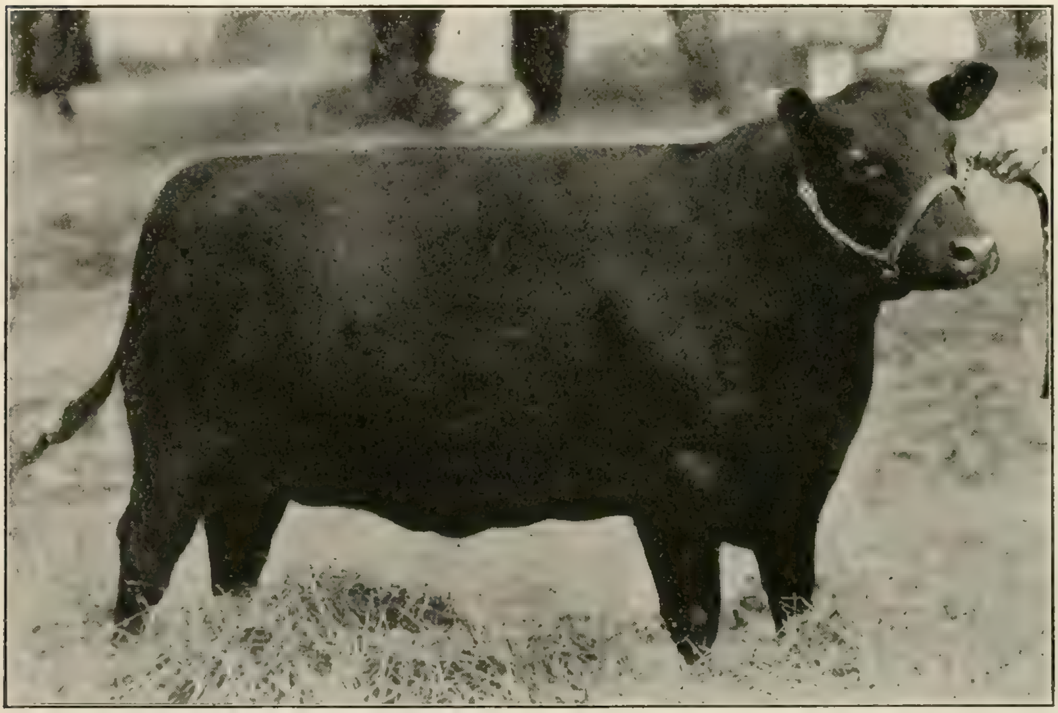
Bull, Senior Calf—First, L. R. Kershaw, on Muskogee Ben Hur, 279026; second, Escher & Ryan, on King Commander, 287261; third, Willow Lawn Farm, on Kavinka D; fourth, John H. Fitch, on Black Berber, 282479; fifth, Kemp Bros., on Proud Peter 2nd, 293682; sixth, Hess & Brown, on Ernest of Quietdale, 276839; seventh, Miles Gardner.

Bull, Junior Calf—First, Escher & Ryan, on Blackcap Revolution, 287269; second and third, L. R. Kershaw, on Kempster, 288876, and Hermboy, 288878.

Cow Three Years or Over—First, L. R. Kershaw, on Twin Burn Pride 5th, 185015; second, third and fourth, Escher & Ryan, on Blackcap McHenry 131, 198502, Black Bird Gift 13, 219522, and Erica McHenry 39, 183801; fifth, R. W. Plummer, on Brookside Elora, 245078; sixth, John H. Fitch, on Key of Rio Vista, 169745; seventh, Carl A. Rosenfeld, on Queen of Odebolt, 197020; eighth, Will Christenson, on Blackbird 148th, 178289.

Heifer Two Years and Under Three—First and third, Escher & Ryan, on Blackcap Lassie 13th, 261262, and Pride Perfection, 254131; second, L. R. Kershaw, on Muskogee May 6th, 268178; fourth and sixth, John H. Fitch, on Kosimo, 228592, and Blackbird Baroda, 260078; fifth, Carl A. Rosenfeld, on Black Cap of Resengift, 265258; seventh, Miles Gardner, on Barbara Brownwell, 244417; eighth, R. W. Plummer, on Blackcap Lassie 16th, 244863.

Heifer, Senior Yearling—First, R. W. Plummer, on Blackbird of Glyn Mawr, 2, 264593; second and fifth, Escher & Ryan, on Pride Protest, 254162, and Erica Elite, 254142; third, L. R. Kershaw, on Muskogee May 7th, 268179; fourth, Carl A. Rosenfeld, on Epic, 265263; sixth, Carl A. Rosenfeld, on Black Quissy, 265262; seventh, John H. Fitch, on Bluebird F., 260093; eighth, W. J. Galbraith & Sons, on Blackcap Judy 30th, 261040.



ELMONA

Junior Champion Angus Cow. Escher & Ryan, Irwin, Iowa.

Heifer, Junior Yearling—First and fourth, Escher & Ryan, on Elmona, 261281, and Erica Energy, 261283; second, L. R. Kershaw, on Pride of Muskogee 3rd, 268181; third, Miles Gardner; fifth and eighth, Hess & Brown, on Inquiry of Glyn Mawr 5th, 264597, and Blackbird of Quietdale 74th, 267199; sixth, J. W. Galbraith & Sons, on Blackcap Judy 35th, 284953; seventh, R. W. Plummer, on Elberte E., 277471.

Heifer, Senior Calf—First, L. R. Kershaw, on Muskogee Blackbird K, 273888; second, Hess & Brown, on Blackcap of Quietdale 4th, 276834; third, fifth and sixth, Escher & Ryan, on Blackbird Progress 6th, 287260, and Pride Perfection 8th, 287262, and Blackbird Progress 7th, 827264; fourth, Willow Lawn Farm, on Elmoda; seventh, John H. Fitch, on Patsy K. 282484; eighth, Carl A. Rosenfeld, on Envie, 297630.

Heifer, Junior Calf—First and second, Escher & Ryan, on Queen Missie, 287267, and Pride Perfection 9th, 287266; third, Hess & Brown, on Blackbird of Quietdale 79th, 295611; fourth, Willow Lawn Farm, on Pride D; fifth and sixth, L. R. Kershaw, on Pride of Muskogee 4th, 289811, and Muskogee Heather Rose 2nd, 288877.

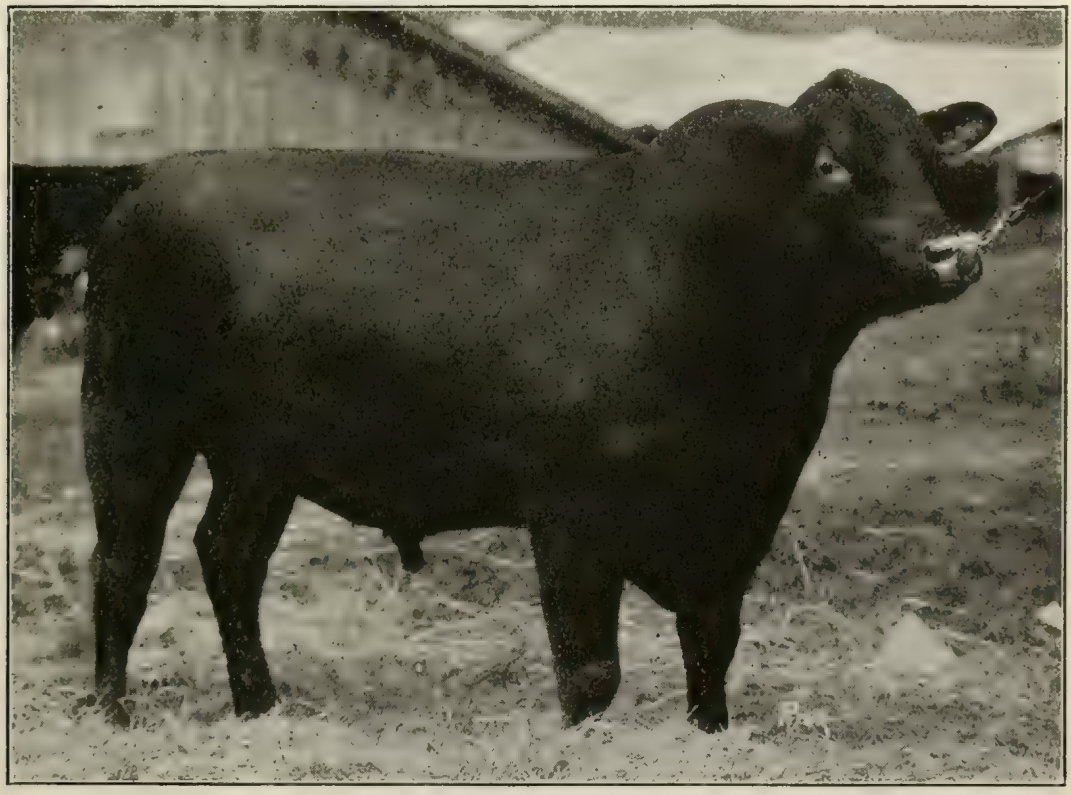
Champion Bull Two Years Old and Over—Escher & Ryan, on Bar Marshall, 229185.

Champion Bull Under Two Years Old—Hess & Brown, on Blue Blood 2nd, 267193.

Champion Cow Two Years Old or Over—L. R. Kershaw, on Twin Burn Pride 5th, 185015.

Champion Heifer Under Two Years Old—Escher & Ryan, on Elmona, 261281.

Grand Champion Bull Any Age—Escher & Ryan, on Bar Marshall, 229185.



BAR MARSHALL
Grand Champion Aberdeen Angus Bull. Escher & Ryan, Irwin, Iowa.

Grand Champion Cow or Heifer, Any Age—L. R. Kershaw, on Twin Pride Burn 5th, 185015.

Graded Herd—First and fourth, Escher & Ryan; second, L. R. Kershaw; third, R. W. Plummer; fifth, John H. Fitch; sixth, Carl A. Rosenfeld.

Breeders' Young Herd—First and fourth, Escher & Ryan; second, L. R. Kershaw; third, Hess & Brown; fifth, John H. Fitch; sixth, Miles Gardner.

Breeders' Calf Herd—First, L. R. Kershaw; second and third, Escher & Ryan; fourth, Willow Lawn Farm; fifth, Hess & Brown; sixth, John H. Fitch.

Get of Sire—First, second and fifth, Escher & Ryan; third, L. R. Kershaw; fourth, John H. Fitch; sixth, Willow Lawn Farm; seventh, Miles Gardner.

FIRST PRIZE AGED ANGUS HERD
Escher & Ryan, Irwin, Iowa.

Produce of Cow—First and second, Escher & Ryan; third and fifth, John H. Fitch; fourth and sixth, L. R. Kershaw; seventh, W. J. Galbraith & Sons.

IOWA AMATEUR ABERDEEN ANGUS.

EXHIBITORS—John H. Fitch, Lake City; Miles Gardner, Hamlin; W. J. Galbraith & Sons, Algona; Hess & Brown, Waterloo; Kemp Bros., Marion; R. W. Plummer, Marshalltown; Willow Lawn Farm, Waverly.

JUDGE.................................L. McWHORTER, Aledo, Ill.

Bull, Junior Yearling—First, Kemp Bros., on Quaker Lad K, 281346.

Bull, Senior Calf—First, Willow Lawn Farm, on Kavinka D; second, Kemp Bros., on Proud Peter 2nd, 293682; third, W. J. Galbraith & Sons.

Heifer Two Years, Under Three—First, R. W. Plummer, on Blackcap Lassie 16th, 244863; second, R. W. Plummer, on Blackbird Fuzzy, 271018; third, W. J. Galbraith & Sons, on Blackcap Judy 25th, 261013; fourth, Will Christenson, on Pride of Edenhurst 2nd, 250774; fifth, Will Christenson, on Black Judy 2nd of Edenhurst, 250775.

Heifer, Senior Yearling—First, R. W. Plummer, on Blackbird of Glyn Mawr 2nd, 264593; second, Will Christenson, on Pride of Edenhurst 3rd, 250776; third, W. J. Galbraith & Sons, on Blackcap Judy 30th, 261040.

Heifer, Junior Yearling—First, R. W. Plummer, on Elberta E, 277471; second, W. J. Galbraith & Sons, on Blackcap Judy 35th, 284923; third, R. W. Plummer, on Blackbird Progress 2nd, 261274.

Heifer, Senior Calf—First, Willow Lawn Farm, on Elmoda; second, Willow Lawn Farm, on Elslon D 2nd; third, R. W. Plummer.

Heifer, Junior Calf—First, Willow Lawn Farm, on Pride D.

County Group, to Consist of Four Animals, Any Age or Sex, From Same County—First, Willow Lawn Farm; second, R. W. Plummer; third, W. J. Galbraith & Sons.

POLLED DURHAM.

EXHIBITORS—Fry & Shaver, Iowa City; Albert Hultine, Saronville, Nebraska.

JUDGE.................................W. J. KENNEDY, Sioux City, Ia.

Bull Three Years or Over—First, Albert Hultine, on Lavender Goods, 15071.

Bull Junior Yearling—First, Albert Hultine, on Lord Barmpton, 18950.

Bull, Senior Calf—First, Albert Hultine, on Happy Barmpton, 19603; second, Fry & Shaver, on Sultan's Herd, 19815.

Bull, Junior Calf—Albert Hultine, on Master Key, 19608.

Heifer Two Years, Under Three—First, Albert Hultine, on Gloster Countess 2nd, 795.

Heifer, Senior Yearling—First, Albert Hultine, on Gloster Princess 41st, 4109.

Heifer, Junior Yearling—First, Albert Hultine, on Gloster Princess 5th, 4108.

Heifer, Senior Calf—First, Albert Hultine, on Gloster Countess 3rd, 6671.

Heifer, Junior Calf—First, Albert Hultine, on Countess Duchess 3rd, 6670.

Champion Bull Two Years Old or Over—Albert Hultine, on Lavender Goods, 15071.

Champion Bull Under Two Years Old—Albert Hultine, on Master Key, 19608.

Champion Cow Two Years Old or Over—Albert Hultine, on Gloster Countess 2nd, 795.

Champion Heifer Under Two Years Old—Albert Hultine, on Gloster Princess 41st, 4109.

Grand Champion Bull, Any Age—Albert Hultine, on Lavender Goods, 15071.

Grand Champion Cow or Heifer, Any Age—Albert Hultine, on Gloster Princess 41st, 4109.

Graded Herd—First, Albert Hultine.

Breeders' Young Herd—First, Albert Hultine.

Breeders' Calf Herd—First, Albert Hultine.

Get of Sire—First, Albert Hultine; second, Albert Hultine.

Produce of Cow—First, Albert Hultine.

RED POLLED.

Exhibitors—Glenn Bros., Wohlback, Nebraska; W. S. Hill, Alexandria, South Dakota; Paul C. Larsen Wohlbach, Nebraska; J. W. Larabee, Earlville, Illinois; S. J. Smith, Chadwick, Illinois; Springdale Farm, Red Wing, Minnesota.

Judge..............................Elliott Davis, Holbrook, Nebr.

Bull Three Years or Over—First, Springdale Farm, on Teddy's Playmate, 28488; second, W. S. Hill, on Teddy's Perfection, 24538.

Bull Two Years, Under Three—First, J. W. Larabee, on Antone Charmer, 32299; second, Paul C. Larsen & Son, on Royal Dude, 31735.

Bull, Senior Yearing—First and second, J. W. Larabee, on Joseph Charmer, 34443, and William, 33283.

Bull, Junior Yearling—First and third, W. S. Hill, on Austin, 34538, and Patterson, 36652; second, J. W. Larabee, on Jay Charmer, 34913; fourth, Springdale Farm, on Senator, 35392.

Bull, Senior Calf—First, Paul C. Larsen & Son, on Royal Goods, 36729; second, J. W. Larabee, on Johnnie Charmer, 37459; third, fourth and fifth, Springdale Farm, on Liberties, 35753, Machine Gun, 35684, and Springdale Alexander, 35689.

Bull, Junior Calf—First and fifth, J. W. Larabee, on Tonie Charmer, 37460, and Willie, 37461; second, W. S. Hill, on Bishop, 36670; third, Paul C. Larsen & Son, on Royal Perfection, 37519; fourth, Springdale Farm, on Springdale Falstaff, 37084.

Cow Three Years or Over—First, W. S. Hill, on Constant, 26672; second, Paul C. Larsen & Son, on Xmas Lady, 39077; third, Springdale Farm, on Baroness, 40088; fourth and fifth, J. W. Larabee, on Belle Boyd, 33887, and Lady Crook, 37373.

Heifer Two Years, Under Three—First and second, W. S. Hill, on Marion, 48602, and Cecelia, 48601; third, J. W. Larabee, on Martha, 46693; fourth, Springdale Farm, on Lizzie May, 45238; fifth, Paul C. Larsen & Son, on O. K. Maid, 47681.

Heifer, Senior Yearling—First, W. S. Hill, on Medina, 48616; second and fourth, Springdale Farm, on Springdale Mayflower, 47062, and Springdale Diana, 47593; third, J. W. Larabee, on Bonnie Charmer, 49616; fifth, Paul C. Larsen & Son, on Pansy, 50561.

Heifer, Junior Yearling—First, second and third, J. W. Larabee, on Daisy Charmer, 50251, Bula Charmer, 50252, and Lizzie Chramer, 50255; fourth, W. S. Hill, on Constance, 50604; fifth, Paul C. Larsen & Son, on Red Beauty, 51260.

Heifer, Senior Calf—First, Paul C. Larsen & Son, on Lorraine Dude, 52440; second and fifth, W. S. Hill, on Fulda, 52347, and Bimba, 52348; third and fourth, J. W. Larabee, on Edna Charmer, 53385, and Matie Charmer, 53388.

Heifer, Junior Calf—First and second, J. W. Larabee, on Mamie Charmer, 53388, and Loola Charmer, 53387; third, Paul C. Larsen & Son, on Miss May, 53481; fourth, W. S. Hill, on Lida, 52359; fifth, Springdale Farm, on Pansy, 52921.

Champion Bull Two Years or Over—J. W. Larabee, on Antone Charmer, 32299.

Champion Bull Under Two Years Old—W. S. Hill, on Austin, 34358.

Champion Cow Two Years or Over—W. S. Hill, on Constant, 26672.

Champion Heifer Under Two Years Old—W. S. Hill, on Medina, 48616.

Grand Champion Bull, Any Age—J. W. Larabee, on Antone Charmer, 32299.

Grand Champion Cow or Heifer, Any Age—W. S. Hill, on Constant, 26672.

Graded Herd—First, W. S. Hill; second, J. W. Larabee, third, Paul C Larsen; fourth, Springdale Farm.

Breeders' Young Herd—First and third, J. W. Larabee; second, W. S. Hill; fourth, Springdale Farm.

Breeders' Calf Herd—First and third, J. W. Larabee; second, Paul C Larsen & Son; fourth, W. S. Hill; fifth, Springdale Farm.

Get of Sire—First, second and fourth, J. W. Larabee; third, W. S. Hill; fifth, Paul C. Larsen & Son.

Produce of Cow—First, second and third, J. W. Larabee & Son; fourth, W. S. Hill; fifth, Springdale Farm.

HOLSTEINS.

Exhibitors—Board of Control of State Institutions: State Hospital for Epileptics, Woodward; Mt. Pleasant State Hospital, Mt. Pleasant; Oakdale Sanatorium, Oakdale; Clarinda State Hospital, Clarinda; State Institution for Feeble Minded Children, Glenwood; Independence State Hospital, Independence; Cherokee State Hospital, Cherokee, and the following: J. H. Cleverly, Maxwell; D. E. Cundiff, Grandview, Mo.; N. Dickinson & Son, Lake Geneva, Wisconsin; E. J. Erickson, Cambridge; Henderson & Erickson, Randall; Hargrove & Arnold, Norwalk; Marlow & Randall, Mankato, Minn.; Maxwell Farm, Waterloo; Chas. Otis, Boone; A. F. Randolph, Canton, Ill.; U. S. Disciplinary Barracks, Ft. Leavenworth, Kansas.

Judge.................................J. B. Fitch, Manhattan, Kansas.

Bull Three Years or Over—First, Marlow & Randall, on Sir Pietertje Ormsby Mercedes 14th, 81142; second, U. S. Disciplinary Barracks, on Johanna Bonheur Champion 2nd, 143420; third, N. Dickinson & Son, on Iowana Sir Ollie, 114797; fourth, Maxwell Farm, on Colantha Duchland Snowdrop Jr., 127646; fifth, Mt. Pleasant State Hospital, on Sir Sadie Cornucopia Home Farm.

Bull Two Years, Under Three—First, J. H. Cleverly, on Sir Pietertje Watson Homestead, 213935; second, Clarinda State Hospital, on King Pietertje Ormsby Piebe 2nd, 230582; third, E. J. Erickson, on Oak Dale Spring De Kol, 309832.

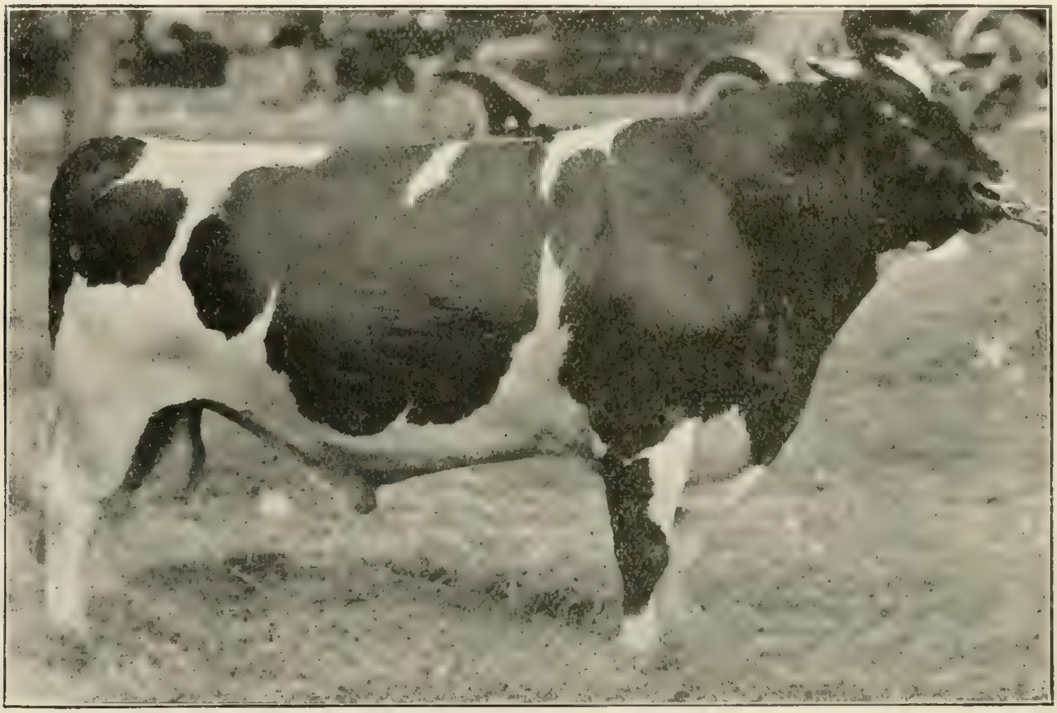
Bull One Year, Under Two—Maxwell Farm, on Sadie Johanna Korndyke King, 238634; second, Institution Feeble Minded Children, on King Pietertje Gayne Ormsby, 245382; third, N. Dickinson & Son, on Wakowis Ollie Hartog, 240660; fourth, Henderson & Erickson, on Tritonia Pietertje Ormsby, 237603; fifth, U. S. Disciplinary Barracks, on U. S. Sir Challenge Johanna, 230926.

Bull Senior Calf—First, N. Dickinson & Son, on Walcowis Ollie Netherland, 254004; second, Maxwell Farm, on Sir Ormsby Skylark Lyons, 264967; third and fourth, U. S. Disciplinary Barracks, on U. S. Ormsby Walker Buttercup 78th, 254407 and U. S. Korndyke Homestead Segis 68th, 258219; fifth, E. J. Erickson, on King Segis Lone Cedar, 274613.

Bull, Junior Calf—First, U. S. Disciplinary Barracks, on U. S. Ak Krummer Ormsby De Kol Pontiac 101st, 263146; second, Maxwell Farm, third, Cherokee State Hospital, on Cherokee Inka Wayne; fourth, Hargrove & Arnold, on King Mutual Korndyke 11th; fifth, Maxwell Farm.

Cow Four Years or Over—First and second, N. Dickinson & Son, on Woodcrest Ida 2nd, 205396, and Walcowis Pontiac Inka, 285798; third, Institution Feeble Minded Children, on Gudultje Korndyke, 245990; fourth, Maxwell Farm, on Buffalo Fancy Skylark, 127847; fifth, U. S. Disciplinary Barracks, on Bessie Forbes Canary Homestead 1, 168924.

Cow Three Years, Under Four—First and second, U. S. Disciplinary Barracks, on Johanna Pontiac Burke 2nd, No. 51, 304527, and Johanna Echo De Kol Pontiac, No. 96, 344140; third, Hargrove & Arnold, on North River Tidy Netherland, 358159; fourth, Chas. Otis, on Nero Colantha Beets, 432574; fifth, State Sanatorium, 305123.



SIR PIETERTJE ORMSBY
Champion Holstein Bull. Marlow & Randall, Mankato, Minn.

Heifer Two Years, Under Three—First and third, Maxwell Farm, on Johanna Beets Skylark Segis, 387347, and L. Ormsby Ragapple Segis, 410577; second, U. S. Disciplinary Barracks, on Beautiful Johanna De Kol 306, 397782; fourth, State Sanatorium, on Oakdale Wickfield Colantha, 388668; fifth, N. Dickinson & Son, on Walcowis Ormsby Betty, 367345.

Heifer, Senior Yearling—First, Maxwell Farm, on Netty Ormsby Burke, 463002; second, third and fourth, N. Dickinson & Son, on Walcowis Ollie Inka, 401119, Walcowis Ollie Pasch, 442494, and Walcowis Ollie Netherland, 442489; fifth, U. S. Disciplinary Barracks, on U. S. Duchess Canary Oak De Kol 118th, 418307.

Heifer, Junior Yearling—First, N. Dickinson & Son, on Walcowis De Kol Inka, 442493; second and fourth, Maxwell Farm, on Queen Ormsby S. Fayne, 450771 and Fobes Ormsby Skylark, 451948; third, U. S. Disciplinary Barracks, on Johanna Bonheur Mercedes Segis 309, 463028; fifth, J. H. Cleverly, on Piebe Beauty Korndyke Ormsby, 509051.

Heifer, Senior Calf—First and second, Maxwell Farm, on Queen Ormsby Netherland Parthena, 484158, and Flush Ormsby Skylark, 509087; third, N. Dickinson & Son, on Walcowis Ollie, 468533; fourth, U. S. Disciplinary Barracks; fifth, Hargrove & Arnold, on Bonnie Fayne Piebe, 492151.

Heifer, Junior Calf—First, Maxwell Farm, on Clotilda O. Skylark; second and third, N. Dickinson & Son, on Walcowis Ormsby Jessie, 500900 and Walcowis Ollie Longfield, 500894; fourth, J. H. Cleverly, on Fayne Piebe Ormsby, 509048; fifth, U. S. Disciplinary Barracks, on U. S. Lady Alcie Inka Korndyke, 279th, 503786.

Champion Bull Two Years or Over—Marlow & Randall, on Sir Pietertje Ormsby Mercedes 14th, 81142.

Champion Bull Under Two Years Old—N. Dickinson & Son, on Walcowis Ollie Netherland, 254004.

Champion Cow Two Years Old or Over—U. S. Disciplinary Barracks, on Johanna Pontiac Burke 2nd, No. 51, 304527.

Champion Heifer Under Two Years Old—Maxwell Farm, on Queen Ormsby Netherland Parthena.

Grand Champion Bull, Any Age—Marlow & Randall, on Sir Pietertje Ormsby Mercedes 14th, 81142.

Grand Champion Cow or Heifer, Any Age—Maxwell Farm, on Queen Ormsby Netherland Parthena.

Graded Herd—First, Maxwell Farm; second, U. S. Diciplinary Barracks; third, N. Dickinson & Son; fourth, E. J. Erickson.

Breeders' Young Herd—First, N. Dickinson & Son; second, Maxwell Farm; third, U. S. Disciplinary Barracks; fourth, J. H. Cleverly.

Breeders' Calf Herd—First, Maxwell Farm; second, U. S. Disciplinary Barracks; third, N. Dickinson & Son; fourth, J. H. Cleverly.

Get of Sire—First and fifth, Maxwell Farm; second and third, N. Dickinson & Son; fourth, U. S. Disciplinary Barracks.

Produce of Cow—First, U. S. Disciplinary Barracks; second and fourth, Maxwell Farm; third, N. Dickinson; fifth, J. H. Cleverly.

IOWA AMATEUR HOLSTEINS.

Exhibitors—J. H. Cleverly, Maxwell; Maxwell Farm, Waterloo; Chas Otis, Boone; E. J. Erickson, Cambridge.

Judge..................................C. L. Blackman, Ames, Iowa.

Bull Two Years, Under Three— First, E. J. Erickson, on Oakdale Spring De Kol, 309832.

Bull, Junior Yearling—First, Chas. Otis, on Honorable Fayne Watson Gamma, 241809; second, E. J. Erickson, on Mr. Ormsby Korndyke, 258683.

Bull, Senior Calf—First, E. J. Erickson, on King Segis Pontiac Lone Cedar, 274612; second, E. J. Erickson, on King Segis Lone Cedar, 274613; third, E. J. Erickson, on King Cassie Segis 12th, 274611; fourth, E. J. Erickson, on King Cassie Segis 11th, 274610.

Bull, Junior Calf—First, E. J. Erickson, on Oakdale Spring De Kol 3rd, 274615.

Heifer Two Years, Under Three—First, Chas. Otis, on Violet Colantha Wickfield; second, E. J. Erickson, on Beauty Ina Segis Lone Cedar, 411911.

Heifer, Junior Yearling—First, E. J. Erickson, on Colantha Belle Korndyke 2nd, 478980.

Heifer, Senior Calf—First, Chas. Otis, on Riverside Malda Pontiac.

Heifer, Junior Calf—First, E. J. Erickson, on Miss Belle Korndyke 2nd, 510883; second, E. J. Erickson, on Colantha Belle Korndyke 3rd, 510882.

County Group, to Consist of Four Animals, Any Age or Sex, From Same County—First, E. J. Erickson.

DIPLOMAS.

Premier Exhibitor—Maxwell Farm, Waterloo, Iowa.

Premier Breeder—N. Dickinson & Son, Lake Geneva, Wis.

JERSEYS.

EXHIBITORS—L. C. Adams, Colfax; J. K. Dering, Lake Villa, Illinois; Ed. F. Evans, Webster City; Ed. C. Lasater, Falfurrias, Texas; Lewis F. Randolph. Ankeny; The Walnuts, Tallula, Illinois.

JUDGE............................H. G. VAN PELT, Waterloo, Iowa.

Bull Three Years or Over—First and second, Ed. C. Lasater, on Sophia 19th Tormentor, 113302, and Island Rosabel's Aldan, 150026; third, Lewis F. Randolph, on Speckled Hips You'll Do, 137108; fourth, L. C. Adams, on Prince's Stockwell Buster, 131811.

Bull Two Years, Under Three—First, Ed. C. Lasater, on Madam's Oxford Noble, 154078; second, Ed. F. Evans, on Ames Financia Beau Gamma, 162824.

Bull One Year, Under Two—First, fourth and fifth, Ed. C. Lasater, on Esther's Falfurrias Oxford, 165566, Rosebud's Royal Majesty, 165578, and Martha's Falfurrias Majesty, 165555; second, J. K. Dering, on Raleigh's Bright Prince, 163966; third, Lewis F. Randolph, on Ada's Bessie You'll Do, 175041.

Bull, Senior Calf—First and third, Ed. C. Lasater, on Falfurrias Nobleman, 174035, and Abigails Falfurrias Knight, 174034; second, J. K. Dering, on Cedar Crest Herd No. 425.

FALFURRIAS NOBLEMAN

Junior and Grand Champion Jersey Bull. Ed. C. Lasater, Falfurrias, Texas.

Bull, Junior Calf—First, J. K. Dering, on Cedar Crest Herd No. 438; second and third, Ed. C. Lasater, on Lady Love's Knight, 174036, and Mon Plaiser's Oxford Majesty.

Cow Four Years or Over—First, second, third, fourth and fifth, Ed. C. Lasater, on Emminent Lad's Golden Fancy, 338932, Willow's Brightness, 299231, Constance of Falfurrias, 322639, Emminent Lad's Island Star, 366031, Oxford Vixen's Brown Beauty, 294310.

Cow Three Years, Under Four—First and third, Ed. C. Lasater, on Village Knights Jessie, 362487, and Alden's Noble Jessica, 362481; second, J. K. Dering, on Eagle's Chief Fairy, 403122.

Heifer Two Years, Under Three—First and second, J. K. Dering, on Eagle's Chief's Eulinda, 403135, and Eagle's Yilande Girl, 407696; third, fourth and fifth, Ed. C. Lasater, on Majesty's Lady Westgate, 383998, Oxford's Beulah Melrose, 383992, and Oxford's Champion Lily, 383962.

Heifer, Senior Yearling—First and third, Ed. C. Lasater, on Vixen's Oxford Imperial, 110412, and Aldan's Violet Lady, 423192; second, fourth and fifth, J. K. Dering, on Eulinda of Cedar Crest, 421165, Blue Belle of Cedar Crest, 421164, and Fairy Boy's Crown, 421167.

Heifer Junior Yearling—First and second, E. C. Lasater, on Raleigh's May Princess, 421527, and Oxford's Sultan's Theresa, 447317; third and fifth, J. K. Dering, on Fairy Boy's Fontaine, 435910, and Yolande's Fairy Girl, 446655; fourth, Lewis F. Randolph, on Jolly's Pretty Lass, 448349.

Heifer, Senior Calf—First, second and third, Ed. C. Lasater, on Great Scott's Constance, 447015, Fancy Falfurrias Carnation, 448631, and Great Scott's Mignon, 447016; fourth J. K. Dering, on Cedar Crest Herd No. 426; fifth, Lewis F. Randolph, on You'll Do's Bessie, 449209.

Heifer, Junior Calf—First and third, J. K. Dering, on Cedar Crest Herd No. 432, and Cedar Crest Herd No. 435; second, Ed. C. Lasater, on Great Scott's Lady Westgate; fourth and fifth, Lewis F. Randolph, on You'll Do's Hazelnut, 449211, and You'll Do's Pretty Lady Marie, 449210.

Champion Bull Two Years Old or Over—Ed. C. Lasater, on Sophia 19th Tormentor, 113302.

Champion Bull Under Two Years Old—Ed. C. Lasater, on Falfurrias Nobleman, 174035.

Champion Cow Two Years or Over—Ed. C. Lasater, on Emminent Lad's Fancy, 338932.

Champion Heifer Under Two Years Old—Ed. C. Lasater, on Great Scott's Constance, 447015.

Grand Champion Bull, Any Age—Ed. C. Lasater, on Sophia's 19th Tormentor, 113302.

Grand Champion Cow and Heifer, Any Age—Ed. C. Lasater, on Emminent Lad's Golden Fancy, 338932.

Graded Herd—First, second and third, Ed. C. Lasater.

Breeders' Young Herd—First, Ed. C. Lasater; second, J. K. Dering.

Breeders' Calf Herd—First, Ed. C. Lasater; second, J. K. Dering.

Get of Sire—First and second, Ed. C. Lasater; third and fourth, J. K. Dering; fifth, L. F. Randolph.

Produce of Cow—First and fourth, J. K. Dering; second and third, Ed. C. Lasater; fifth, L. F. Randolph.

Premier Exhibitor—Ed. C. Lasater.

Premier Breeder—Ed. C. Lasater.

IOWA AMATEUR JERSEYS.

Exhibitors—Ed. F. Evans, Webster City; L. F. Randolph, Ankeny.

Judge..................................C. L. Blackman, Ames, Iowa.

Bull Two Years, Under Three—First, Ed. F. Evans, on Ames Financia Beau Gamma, 162824.

Bull, Senior Yearling—First, L. F. Randolph, on Ada's Bessie You'll Do, 175041.

Bull, Junior Yearling—First, L. F. Randolph, on Juliet You'll Do, 175042.

Heifer, Junior Yearling—First, L. F. Randolph, on Jolly's Pretty Lass, 448349.

Heifer, Senior Calf—First, L. F. Randolph, on You'll Do Bessie, 449209.

Heifer, Junior Calf—First, L. F. Randolph, on You'll Do Pretty Lady Marie, 449210; second, L. F. Randolph, on You'll Do's Hazelnut, 449211.

County Group, to Consist of Four Animals, Any Age or Sex, From Same County—First, L. F. Randolph.

GUERNSEYS.

EXHIBITORS—Fred C. Butler, Alta; W. O. Bohart, Bozeman, Montana; Caribou Farms, Saginaw, Michigan; Dairyland Farm, Storm Lake; H. W. Griswold, West Salem; W. W. Marsh, Waterloo.

JUDGE............................W. A. MCKERROW, St. Paul, Minn.

Bull Three Years or Over—First, Fred C. Butler, on Daun's King, 41178; second, Caribou Farms, on Caribou King Albert, 39281.

Bull Two Years, Under Three—First, W. W. Marsh, on Cherub's Prince, 41543; second, Dairyland Farm, on Plato of 4 Pine, 43396.

Bull One Year, Under Two—First, W. W. Marsh, on Marie's Cherub of the Prairie, 48138; second, Caribou Farms, on Caribou Corporal, 51233; third, Dairyland Farm, on Handsome Clyde, 50331.

Bull, Senior Calf—First, W. W. Marsh, on Bramble of the Prairie, 54599; second and fifth, Dairyland Farm, on Triple Golden Boy 2nd and Dairyland Prince; third and fourth, Caribou Farms, on Caribou Marshall, and Caribou Jokastus.

Bull, Junior Calf—First, Dairyland Farm, on Hawthorn of Weidywold; second, Caribou Farms, on Caribou Albertas King; third, W. O. Bohart, on Gallatin Major.

Cow Four Years or Over—First, Caribou Farms, on Neronic, 43595; second, Fred C. Butler, on Bertha's Pride of Jessett, 41014; third, W. W. Marsh, on Imp. Ladock Loyalty, 67901; fourth, Dairyland Farm, on Imp. Herivels Betty, 33738.

Cow Three Years, Under Four—First, W. W. Marsh, on Imp. Ladock Loyalty 2nd, 67907; second, Dairyland Farm, on Lady Jennie of Mapledell, 63064.

Heifer Two Years, Under Three—First, Caribou Farms, on Caribou Mary, 75522; second, Dairyland Farm, on Vanquisher's Arabella, 72679; third, W. W. Marsh, on Princess Bopeep of the Prairie, 89439.

Heifer, Senior Yearling—First and second, Caribou Farms, on Caribou Eliz., 84289, and Caribou Rose, 87281; third, Dairyland Farm, on Glenwoods Lily of Mapledell; fourth, Fred C. Butler, on Holden's Bertha, 82910.

Heifer, Junior Yearling—First and third, W. W. Marsh, on Cherub's Grace Darling, 83504, and Moss Rose of the Prairie, 89442; second and fifth, Caribou Farms, on Caribou Josie, 84334, and Caribou Edna 2nd, 87286; fourth, Dairyland Farm, on Reputation's Prima Donna.

Heifer, Senior Calf—First and third, W. W. Marsh, on Honey Bloom of the Prairie, 89451, and Golden Locks of the Prairie, 89448; second, Caribou Farms, on Caribou Buttercup.

Heifer, Junior Calf—First, Caribou Farms, on Caribou Mazeppa; second, Dairyland Farm, on Betty of Dairyland.

Champion Bull Two Years Old or Over—W. W. Marsh, on Cherub's Prince, 41543.

Champion Bull Under Two Years Old—W. W. Marsh, on Marie's Cherub of the Prairie, 48138.

Champion Cow Two Years Old or Over—Caribou Farms, on Neronic, 43595.

Champion Heifer Under Two Years Old—W. W. Marsh, on Honey Bloom of the Prairie, 89451.

Grand Champion Bull, Any Age—W. W. Marsh, on Cherub's Prince, 41543.

Grand Champion Cow or Heifer, Any Age—W. W. Marsh, on Honey Bloom of the Prairie, 89451.

Graded Herd—First, W. W. Marsh; second, Caribou Farms; third, Dairyland Farm.

Breeders' Young Herd—First, W. W. Marsh, second, Caribou Farms; third, Dairyland Farm.

Breeders' Calf Herd—First, W. W. Marsh; second, Caribou Farms; third, Dairyland Farm.

Get of Sire—First, W. W. Marsh; second, Caribou Farms; third, Dairyland Farm.

Produce of Cow—First, W. W. Marsh; second and third, Caribou Farms; fourth and fifth, Dairyland Farm.

Premier Exhibitor—Caribou Farms.

Premier Breeder—Caribou Farms.

IOWA AMATEUR GUERNSEYS.

EXHIBITORS—Fred C. Butler, Alta.

JUDGE.......................................C. L. Blackman, Ames, Ia.

Bull, Senior Calf—First, Fred C. Butler, on Bertha's King.

Heifer, Senior Yearling—First, Fred C. Butler, on Holden's Bertha, 82910.

Heifer, Junior Yearling—First, Fred C. Butler, on Frosene's Queen, 90372.

Heifer, Senior Calf—First, Fred C. Butler, on Dairyland Jane.

County Group, to Consist of Four Animals, Any Age or Sex, From Same County—First, Fred C. Butler.

AYRSHIRE.

EXHIBITORS—Stephen Bull, Racine, Wisconsin; Morgan Horse Farm, Plainfield; C. H. Peverill, Waterloo; Adam Seitz, Waukesha, Wisconsin.

JUDGE.............................J. B. FITCH, Manhattan, Kansas.

Bull Three Years or Over—First, C. H. Peverill, on Willowmoor Robin Hood, 15339.

Bull Two Years, Under Three—First, Stephen Bull, on Friendless Lead Victor.

Bull One Year, Under Two—First, C. H. Peverill, on Cavalier's Fashion Plate, 21222; second, Morgan Horse Farm, on Otterkill King Albert, 22394.

Bull, Senior Calf—First, C. H. Peverill, on Rosebud Buster; second, Stephen Bull, on Aldebaran Magnificent.

Bull, Junior Calf—First, C. H. Peverill, on Rosebud Sensation; second, C. H. Peverill, on Rosebud Prince.

Cow Four Years or Over—First, Stephen Bull, on Highland Polly; second, C. H. Peverill, on Lessenessock Carleton, 40624; third, Stephen Bull, on Wyllieland Clementine 4th; fourth, C. H. Peverill, on Cherry Bank Sylvia, 34228; fifth, Stephen Bull, on Chapmanton Pansy 7th.

Cow Three Years, Under Four—First, Stephen Bull, on Blossom Again 3rd; second, C. H. Peverill, on Nora Good Gift, 41534.

Heifer Two Years, Under Three—First, C. H. Peverill, on Beauty of Cloverdale, 46902; second, Stephen Bull, on Dalfibble Actress; third, C. H. Peverill, on Vivians Howies Ella, 46195.

Heifer, Senior Yearling—First, C. H. Peverill, on Cavalier Cherry Blossom, 48134; second, C. H. Peverill, on Bertha Carleton, 52961; third, Morgan Horse Farm, on Esther Colby, 57140.

Heifer, Junior Yearling—First, C. H. Peverill, on Cherry Good Gift, 55039; second, Stephen Bull, on Golden Loves Delightful.

Heifer, Senior Calf—First, Stephen Bull, on Aldebaran Molly; second,

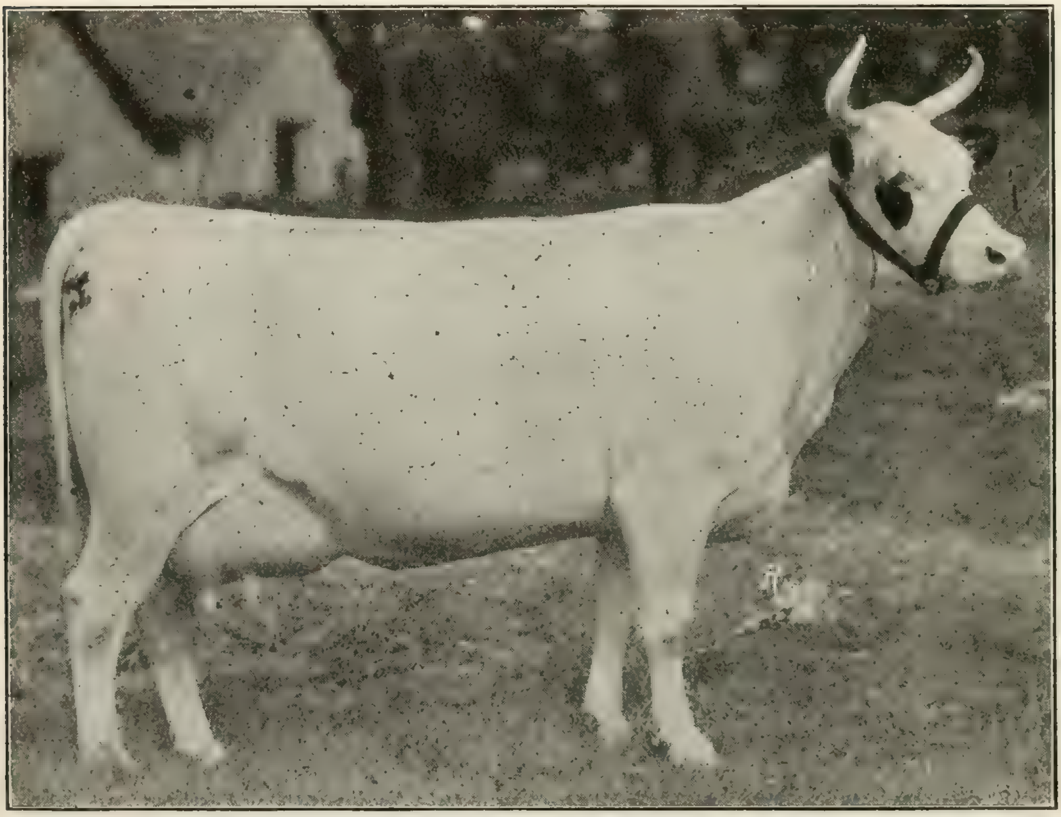
C. H. Peverill, on Nellie Carleton; third, C. H. Peverill, on Rosebud Stonhouse Lucy Yet; fourth, Stephen Bull, on Aldebaran Daisy.

Heifer, Junior Calf—First, C. H. Peverill, on Rose Bud Violet; second. Stephen Bull, on White Floss 4th of Aldebaran; third, C. H. Peverill, on Rosebud Beauty; fourth, Stephen Bull, on Aldebaran Mabel.

Champion Bull Two Years or Over—Stephen Bull, on Friendless Lead Victor.

Champion Bull Under Two Years Old—C. H. Peverill, on Cavalier's Fashion Plate 21222.

Champion Cow Two Years or Over—C. H. Peverill, on Beauty of Cloverdale, 46902.



BEAUTY OF CLOVERDALE

Senior and Grand Champion Ayrshire Cow. C. H. Peverill, Waterloo, Iowa.

Champion Heifer Under Two Years Old—C. H. Peverill, on Rosebud Violet.

Grand Champion Bull, Any Age—C. H. Peverill, on Cavalier's Fashion Plate, 21222.

Grand Champion Cow or Heifer, Any Age—C. H. Peverill, on Beauty of Cloverdale, 46902.

Graded Herd—First, C. H. Peverill; second, Stephen Bull.

Breeders' Young Herd—First, C. H. Peverill.

Breeders' Calf Herd—First, C. H. Peverill; second, Stephen Bull.

Get of Sire—First, C. H. Peverill.

Produce of Cow—First, second and third, C. H. Peverill.

Premier Exhibitor—C. H. Peverill.

Premier Breeder—C. H. Peverill.

BROWN SWISS.

EXHIBITORS—W. O. Bohart, Bozeman, Montana; John Cooper, Clinton, Wisconsin; Mooney and Larabee, Fort Dodge,

JUDGE............................HUGH G. VAN PELT, Waterloo, Ia.

Bull Three Years or Over—First, Mooney & Larabee Bros., on Hefty's Boy of Valley Grove, 4038; second, W. O. Bohart, on Dick of Lake View, 4105.

Bull Two Years, Under Three—First, John Cooper, on Belles Midge's Senator, 5966; second, Mooney & Larabee Bros., on Carl the 6th, 6166; third, W. O. Bohart, on Beauty C's Master, 6318; fourth, W. O. Bohart, on Gem's Master, 6003.

Bull One Year, Under Two—First, W. O. Bohart, on Beauty C's N. M., 6815; second, Mooney & Larabee Bros., on England, 6644; third, John Cooper, on Ilda's College Boy, 6663.

Bull, Senior Calf—First, Mooney & Larabee Bros., on Andre, 6903; second, W. O. Bohart, on D's Bob, 7360; third, W. O. Bohart, on Nick's Master 2nd, 7362; fourth, John Cooper, on Yule Tide, 7326.

Bull, Junior Calf—First, W. O. Bohart, on Jura's Nick, 7364; second, John Cooper, on Abe Duwire, 7162; third, W. O. Bohart, on Jura M's King, 7363; fourth, W. O. Bohart, on Beauty C's N. M. 2nd, 7359; fifth, W. O. Bohart, on Tassa's Bob, 7478.

Cow Four Years or Over—First, John Cooper, on Susie, 6318; second, John Cooper, on Stillwater Queen, 6940; third, W. O. Bohart, on Albert Tassa, 6529; fourth, W. O. Bohart, on Upland Nick's Prize, 3670; fifth, Mooney & Larabee Bros., on Dobby Robbins, 7927.

Cow Three Years, Under Four—First, Mooney & Larabee Bros., on Manilla, 7909; second, W. O. Bohart, on Master's Beauty C. 2nd, 7961; third, John Cooper, on Lady Trilby, 8257; fourth, W. O. Bohart, on Master's Tassa, 7486.

Heifer Two Years, Under Three—First, John Cooper, on Lot's Alice, 8257; second, Mooney & Larabee Bros., on Nifty, 9217; third, John Cooper, on Trice Blue, 8766; fourth, Mooney & Larabee Bros.; fifth, W. O. Bohart, on Brownie's Perfection, 8612.

Heifer, Senior Yearling—First, John Cooper, on Miss Liberty Lot, 9861; second, Mooney & Larabee Bros., on Little Egypt, 9215; third, W. O. Bohart, on Beauty D., 9634.

Heifer, Junior Yearling—First, John Cooper, on College Master's Queen 2nd, 9386; second, Mooney & Larabee Bros., on Jeanne L., 9922; third, W. O. Bohart, on D's Alice H., 9819.

Heifer, Senior Calf—First, W. O. Bohart, on Bob's Mascott, 10546; second. John Cooper, on Mary Clark's 3rd, 10316; third, John Cooper, on Fleta's 3rd, 10317; fourth, W. O. Bohart, on Katharine's Heifer, 10595; fifth, Mooney & Larabee Bros., on Emma A.

Heifer, Junior Calf—First, John Cooper, on Miss Pauline, 10749; second, W. O. Bohart, on Nick's Alice C., 10598; third, John Cooper, on Betty Jean of Rock Ridge, 10724; fourth, W. O. Bohart, on Nellie Deer, 10593; fifth, Mooney & Larabee Bros., on Mary Ann 1.

Champion Bull Two Years Old or Over—John Cooper, on Belles Midge's Senator, 5966.

Champion Bull Under Two Years Old—W. O. Bohart, on Jura's Nick, 3764.

Champion Cow Two Years Old or Over—John Cooper, on Susie, 6318.

Champion Heifer Under Two Years Old—John Cooper, on Miss Pauline, 10749.

Grand Champion Bull, Any Age—John Cooper, on Belle's Midge's Senator, 5966.

Grand Champion Cow or Heifer, Any Age—John Cooper, on Susie, 6318.

Graded Herd—First, John Cooper; second, Mooney & Larabee Bros.; third, W. O. Bohart.

Breeders' Young Herd—First, W. O. Bohart; second, John Cooper; third, Mooney & Larabee Bros.

Breeders' Calf Herd—First, W. O. Bohart; second, John Cooper.

Get of Sire—First, Mooney & Larabee Bros.; second, John Cooper; third, W. O. Bohart; fourth, John Cooper; fifth, W. O. Bohart.

Produce of Cow—First, W. O. Bohart; second, John Cooper; third, Mooney & Larabee Bros.; fourth, John Cooper; fifth, W. O. Bohart.

Premier Exhibitor—First, John Cooper.

Premier Breeder—First, W. O. Bohart.

FAT SHORTHORNS.

Exhibitors—Robert Andrews, Melbourne; Richard Barnes, Oskaloosa; Harold Bayer, Farmington; Chester Bayer, Farmington; Wayne Binford, Liscomb; Clarence L. Bowman, Webster; Ralph Buck, State Center; Frank Buchanan, Ottumwa; Earl Buckland, Mapleton; Louis Buss, Dow City; Will Carrier, Newton; Claverburn Farm, Colo; Elsworth Coffman, South English; Irvin Crawford, Stockport; Alfred Ehrecke, Montpelier; Ewing Bros., Morrisville, Missouri; W. A. Forsythe & Sons, Greenwood, Missouri; Josephine Garden, Wapello; Fred L. Graham, Jr., Prairie City; Leonard Hass, Emerson; Leland Holter, Melbourne; Barnard Hosette, Stockport; Albert Hultine, Saronville, Nebraska; Lewis Igo, Indianola; Raymond James, West Liberty; Eugene Kelley, Farmington; King & Plager, Grundy Center; Dwight Knapp, Farmington; F. Raymond Knapp, Farmington; Ellwyn Kroeger, Princeton; Lester Lacey, New Providence; Ralph Morris, Stockport; Redman Bros., Altoona; Howard Richeson, State Center; Francis Ross, Farmington; Sam Rutherford, Ross; Clifford Tague, Kirkman; Violet Tooman, Muscatine; Ramond Wiley, Lineville; Russell Wise, Ottumwa; Russell Woods, Farmington.

Judge......................T. E. Robson, London, Ontario, Canada.

PURE BRED.

Steer, Spayed or Martin Heifer One Year and Under Two—First, Clifford Tague, on Dale's Pride; second, Albert Hultine, on High Marshall, 708332; third, Russell Woods, on Miss Orange 4th, 753951; fourth, G. Miller.

Steer, Spayed or Martin Heifer Under One Year—First, Claverburn Farm, on Proud Dale; second, Clifford Tague, on Beautiful Joe; third, Lewis Igo, on Lucky Star.

Champion Steer, Spayed or Martin Heifer—Claverburn Farm, on Proud Dale.

GRADE OR CROSS BRED.

Steer, Spayed or Martin Heifer One Year and Under Two—First and second, Raymond White; third, Richard Barnes, on Jerry; fourth, Paul Walton.

Steer, Spayed or Martin Heifer Under One Year—First, Clifford Tague, on Blue Grass Beauty; second, King & Plager, on Snow Bird.

Champion Steer, Spayed or Martin Heifer—Raymond White.

FAT HEREFORDS.

Exhibitors—M. Armentrout, Botna; Raymond Beane, LeGrand; Clarence L. Bowman, Webster City; Harry Braun, Nichols; Archie Braun, Nichols; Roy Braun, Nichols; Earl R. Buckland, Mapleton; Louis Buss, Dow City; Ora Campbell, Dallas; E. M. Cassidy & Sons, Whiting; Timothy J. Coakley, Williamsburg; Luther Couser, Zearing; Roy Crawford, Stockport; Arthur Duncan, Oakville; Maynard Eckhardt, Muscatine; Wayne Eckhardt, Muscatine; Elmer Fahrenkrog. Logan; Keith Kelley. Oskaloosa; Chas. G. Knapp, Farmington; Carl T. Lane, Knoxville; Lee Leonard, Bouton; Albert Meisky, Nichols; Raymond Meisky. Nichols; N. D. Pike. Weatherford, Oklahoma; Donald Rankin. Knoxville; Redman Bros., Altoona; Harold Runyan, Letts; Vernon Shepard, Muscatine; James Shepard, Muscatine; George M. Smith, Macksburg; Turner Bros., DeWitt; Cecil Waltemeyer, Melbourne; Fred Wescott, Woodbine; George Wescott, Woodbine; Pearl Wiley, Lineville;! W. L. Yost, Kansas City, Missouri.

JUDGE............................J. H. VAN NATTA, Lafayette. Ind.

PURE BRED.

Steer, Spayed or Martin Heifer Two Years, Under Three—First, N. D. Pike, on Leo D. Fairfax.

Steer, Spayed or Martin Heifer One Year, Under Two—First, Ora Campbell; second, Earl R. Buckland, on Sylvia's Distinction, 711476.

Steer, Spayed or Martin Heifer Under One Year—First, M. Armentrout, on Modest Boy; second, W. L. Yost, on Maple's Eclipse, 237; third, E. M. Cassady & Sons, on Bright Mack; fourth, N. D. Pike, on Picture Show.

Champion Steer, Spayed or Martin Heifer—M. Armentrout, on Modest Boy.

GRADE OR CROSS BRED.

Steer, Spayed or Martin Heifer One Year, Under Two—First and second, M. Armentrout, on Mann Mischief, and Bob White; third, Ora Campbell; fourth, Geo. Marion Smith.

Steer, Spayed or Martin Heifer Under One Year—First, M. Armentrout, on Junior's Lad; second, Elmer Fahrenkrog, on Logan Laddie.

Champion Steer, Spayed or Martin Heifer—M. Armentrout, on Mann Mischief.

FAT ABERDEEN ANGUS.

EXHIBITORS—Ralph Beane, Le Grand; Paul Benner, Rhodes; Clarence L. Bowman, Webster; Earl R. Buckland, Mapleton; Morris Butler, Marshalltown; E. M. Cassady & Sons, Whiting; Orville Carter, Defiance; Robert Collins, Liscomb; James Dean, Nichols; Lyman Doyle, Parnell; Arthur Duncan, Oakville; Berle Dunham, Blakesburg; Escher & Ryan, Irwin; Mabel Fahrenkrog, Logan; Harry Haddock, Rhodes; Verne Hosette, Stockport; Tom Irwin, New Virginia; William Kelley, Osceola; Albert Kemper, Fairport; Cleo Korns, Hartwick; Calvin Korns, Hartwick; Deloss Lacey, New Providence; Ralph Leonard, Bouton; Raymond & Willard Meyer, Dudley; Frank Moninger, Marshalltown; Edgar Morris, Stockport; Henry Morris, Stockport; Elva Probst, West Liberty; Calvin Ridlen, Knoxville; Carl Rosenfeld, Kelley; George Rosenfeld, Kelley; Doyle Schultz, Macksburg; Harold Scott, Ottumwa; Russell Smith, Blakesburg; Walter A. Smith, South English; George W. Stoner, South English; Turner Bros., DeWitt; Vincent L. Ward, Williamsburg; Clare Wiley, Lineville; Willow Lawn Farm, Waverly; Walter Zeller, Earlham.

JUDGE............................W. J. KENNEDY, Sioux City, Iowa.

Steer, Spayed or Martin Heifer One Year and Under Two—First, Calvin Korns, on Black Joe; second, Cleo Korns, on Black Robin; third, Harry Haddock, on Poncho Lad.

Steer, Spayed or Martin Heifer Under One Year—First, George Rosenfeld, on Charlie Gray.

Champion Steer, Spayed or Martin Heifer—Calvin Korns, on Black Joe.

Steer, Spayed or Martin Heifer Two Years and Under Three—First, Carl Rosenfeld, on Teddy; second, Escher & Ryan, on Entrain; third, Willow Lawn Farm, on Attention.

Steer, Spayed or Martin Heifer One Year and Under Two—First, Escher & Ryan, on Blackrock 4th; second, Carl A. Rosenfeld, on Ernest; third, Fon Irwin, on Pete.

Steer, Spayed or Martin Heifer Under One Year—First, Escher & Ryan, on Blackrock 4th; second, Carl A. Rosenfeld, on Black Lad; third, Willow Lawn Farm, on Alert.

Champion Steer, Spayed or Martin Heifer—Carl A. Rosenfeld, on Teddy.

Group of Three Head, Owned by Exhibitor—First, Escher & Ryan; second, Carl A. Rosenfeld; third, Willow Lawn Farm.

PURE BRED, GRADES AND CROSS BREDS.

EXHIBITORS—Clarence L. Bowman, Webster; Claire Burchfield, Winterset; Paul Halfinger, Audubon; William Halfinger, Audubon; Emil Halfinger, Audubon; Frank Hill, Earlham; J. W. Larrabee, Earlham; Roger C. Meade, Mitchellville; Nelson Phillips, Peru; Paul Walton, Earlham; Walter Zeller, Earlham.

JUDGE.............................ELLIOTT DAVIS, Holbrook, Neb.

Steer, Spayed or Martin Heifer One Year and Under Two—First, Clarence I.. Bowman; second, Elsworth Coffman, on Red Rose; third, Walter Zeller, on Jerry.

Steer, Spayed or Martin Heifer Under One Year—First, J. W. Larabee.

Champion Steer, Spayed or Martin Heifer—Clarence L. Bowman, on Jumbo.

IOWA BOYS AND GIRLS' CALF FEEDING CONTEST.

EXHIBITORS—Robert Andrews, Melbourne; Richard Barnes, Oskaloosa; Chester Bayer, Farmington; Harold Bayer, Farmington; Ralph Beane, Le Grand; Raymond Beane, Le Grand; Paul Benner, Rhodes; Wayne Binford, Liscomb; Clarence L. Bowman, Webster; Archie Braun, Nichols; Harry Braun, Nichols; Roy Braun, Nichols; Frank Buchanan, Ottumwa; Morris Butler, Marshalltown; Ralph Buck, State Center; Earl Bucklin, Mapleton; Clair Burchfield, Winterset; Lewis Buss, Dow City; Ora Campbell, Dallas; Jos. Carroll, Parnell; Orville Carter, Defiance; T. J. Coakley, Williamsburg; Elsworth Coffman, South English; Robert Collins, Liscomb; Luther Couser, Zearing; Roy Crawford, Stockport; Irvin Crawford, Stockport; James Dean, Nichols; Lyman Doyle, Parnell; Arthur Duncan, Oakville; Verle Dunham, Blakesburg; Maynard Eckhardt, Muscatine; Wayne Eckhardt, Muscatine; Alfred Ehrecke, Montpelier; Mabel Fahrenkrog, Logan; Elmer Fahrenkrog, Logan; Josephine Garden, Wapello Fred L. Graham, Prairie City; Harry Haddock, Rhodes; Emil Halflinger, Audubon; Paul Halflinger, Audubon; Wm. Halflinger, Audubon; Leonard Hass, Emerson; Frank Hill, Earlham; Leland Holter, Melbourne; Bernard Hosette, Stockport; Vern Hosette, Stockport; Howard Huff, Hillsboro; Lewis Igo, Indianola; Fon Irwin, New Virginia; Raymond James, West Liberty; Eugene Kelley, Farmington; Keith Kelley, Osceola; William Kelley, Osceola; Albert Kemper, Fairport; Edgar Kemper, Montpelier; Charles G. Knapp, Farmington; Dwight Knapp, Farmington; F. Raymond Knapp, Farmington; Calvin Korns, Hartwick; Cleo Korns, Hartwick; Ellyn Kroeger, Princeton; De Loss Lacey, New Providence; Lester Lacey, New Providence; Carl T. Lane, Knoxville; Clark Lekin, Parnell; Ralph Leonard, Bouton; Roger G. Mead, Mitchellville; Raymond Meisky, Nichols; Albert Meisky, Nichols; Raymond & Willard Meyer, Dudley; Gill E. Miller, Bonaparte; Frank Moniger, Marshalltown; Ralph Morris, Stockport; Edgar Morris, Stockport; Henry Morris, Stockport; Richard O'Leary, Barney; Clarence Oswolt, Floris; Nelson Phillips, Peru; Elva Probst, West Liberty; Wayne Probst, West Liberty; Donald Rankin, Knoxville; Redman Bros., Altoona; Howard Richardson, State Center; Albin Ridlen, Knoxville; George Rosenfeld, Kelley; Francis Ross, Farmington; Harold Runyan, Letts; Sam Rutherford, Ross; Doyle & Schults, Macksburg; Harold Scott, Ottumwa; Vernon Shepard, Muscatine; James Shepard, Muscatine; Fleda E. Shipley, Humeston; Leland Shipley, Humeston; George Marion Smith, Macksburg; Russell Smith, Blakesburg; Walter A. Smith, South English; Clarence Stoner, South English; George W. Stoner, South English; W. A. Tade, Jr., Hillsboro; Clifford Tague, Kirkman; Arnold Thiessen, Durant; Edward J. Thompson, Fonda; Violet Tooman, Muscatine; Turner Bros, De Witt; Charley Van De Kamp, Colfax; Cecil Waltemeyer, Melbourne; Paul Walton, Earlham; Vincent L. Ward, Williamsburg; Fred Wescott, Woodbine; George Westcott, Woodbine; Pearl Wiley, Lineville; Clare Wiley, Lineville; Raymond Wiley, Lineville; Russell Wise, Ottumwa; Russell Woods, Farmington; Walter Zeller, Earlham.

JUDGE.............................W. J. KENNEDY, Sioux City, Iowa.

Best Fat Steer or Heifer, Any Breed, Pure Bred, Grade or Cross-bred—First, Cleo Korns, on Black Robin; second, Ora Campbell; third, Clifford Tague, on Dale Pride; fourth, Calvin Korns, on Black Joe; fifth, Geo. M. Smith, on Captain; sixth, Harry Haddock, on Poncho Lad; seventh, Morris Butler, on Rex; eighth, Elva Propst, on Black Beauty; ninth, Lewis Igo, on Lucky Star; tenth, Paul Walton, on Ted; eleventh, Frank Buchanan, on Teddy; twelfth, Geo. Rosenfeld, on Charlie Gray; thirteenth, Ora Campbell; fourteenth, Josephine Garden, on Iowa's Lassie; fifteenth, Howard Richardson, on Broad Hooks, sixteenth, Frank Moninger, on Black Gate; seventeenth, Clarence L. Bowman, on Jumbo; eighteenth, Chas. Van De Kamp, on Billy; nineteenth, Ellwyn Kroeger, on Silver Master, 698788; twentieth, Edgar Morris, on Jean of Elmland 2nd; twenty-first, Glen James; twenty-second, Russell Smith, on Buster; twenty-third, Raymond White; twenty-fourth, Forest Otcheck; twenty-fifth, Raymond White; twenty-sixth, Raymond Meisky; twenty-seventh, James Dean, on Black Bird; twenty-eighth, Deloss Lacey, on Ben; twenty-ninth, Richard Barns, on Jerry; thirtieth, Harold Scott, on Buck; thirty-first, Fon Irwin, on Pete; thirty-second, George Rosenfeld, on Pride of Glidden 4th; thirty-third, Clifford Tague, on Blue Grass Beauty; thirty-fourth, Albert Kemper; thirty-fifth, Charles Buss; thirty-sixth, Russell Woods, on Miss Orange 4th, 753951; thirty-seventh, Luther Couser, on Bill; thirty-eighth, Harold Runyan; thirty-ninth, Chester Bayer, on Miss Valentine, 697745; fortieth, Maynard Eckhardt, on Reath, 709906; forty-first, Gill E. Miller, on Sultana 2nd; forty-second, Raymond White; forty-third, Clarence L. Bowman, on Buster; forty-fourth, Paul Stanley; forty-fifth, Pearl Wiley, on Floosie; forty-sixth, Raymond Beane, on White Face; forty-seventh, Raymond & Willard Meyer, on Joe; forty-eighth, Albert Meisky; forty-ninth, Deloss Lacey, on Royal Queen; fiftieth, Wayne Eckhardt, on Jay.

WINNERS IN THE BOYS AND GIRLS' JUDGING CONTEST.

Rank	Total Points	Name
1	676	Vernon Maple, Orilla, Ia.
2	672	N. Alfred Hill, Williams, Ia.
3	661	Edward Menough, Grimes, Ia.
4	659	Kenneth Maltas, Delmar, Ia.
5	655	Merwin Smith, Des Moines, Ia.
6	653	Robert Boyd, Hornick, Ia.
7	648	Leslie Yaw, Hampton, Ia.
8	647	Harvey Thomas, Iowa City, Ia.
9	646	Chas. Strothman, Yarmouth, Ia.
10	645	Virgil Worneldorff, Webster City, Ia.

BOYS' STOCK JUDGING CONTEST, 1919—WINNING TEAMS BY COUNTIES.

Rank	Total Points	County
1	1956	Polk.
2	1916	Hamilton.
3	1864	Johnson.
4	1855	Clinton.
5	1853	Woodbury.
6	1836	Greene.
7	1788	Iowa.
8	1772	O'Brien.

BOYS' STOCK JUDGING CONTEST, 1919—BY COUNTIES—CONTINUED.

Rank	Total Points	County
9	1766	Marshall.
10	1766	Cedar.
11	1762	Dickinson.
12	1757	Boone.
13	1754	Monona.
14	1749	Crawford.
15	1733	Muscatine.

HERDSMAN'S PRIZE—OFFERED BY THE AMERICAN SHORTHORN BREEDERS' ASSOCIATION.

First, Henry Carl, Herdsman for Krizer Bros., Eddyville, Iowa; second, Wm. H. Iske, Herdsman for George Eggert, Newton, Iowa; third, George Tippitt, Herdsman for Joseph Miller & Sons, Granger, Missouri.

SWINE DEPARTMENT

SUPERINTENDENT........................CYRUS A. TOW, Norway, Iowa

EXHIBITORS—Ahrens Bros., Columbus, Nebraska; E. J. Augsperger, Pulaski, J. L. Armstrong, Zearing; J. F. Anderson, Birmingham; Anderson Bros., West Liberty; John Blauer, Tingley; Bell Bros., Anita; Joe Bieber, Muscatine; R. R. Blake, Dallas Center; A. J. Banks, Montour; C. W. Crees, Coon Rapids; I. J. Conrad, Melbourne; W. E. Conrad, Melbourne; O. V. Clahoun, Birmingham; C. H. Christiansen, & Rierson; William Carey, Fonda; Harry B. Duncan, Bagley; W. W. Davisson & Sons, Wellman; Henry Dorr, Remsen; M. A. Dowling, Valley Junction; Drewelow Bros., New Hampton; Homer Duer, Zearing; H. Fesenmeyer, Clarinda; Robert J. Ford, West Liberty; H. B. Floto, State Center; S. L. Farlow, Ankeny; Wm. E. Green, Algona; R. W. Halford, Manning; Andrew Hansen, Audubon; Holmes Bros., West Liberty; Hague & Girten, Fairfield; Nels C. Jensen, Exira; W. C. Jack & Son, Iowa City; W. D. Jones, Atkins; Joe Kramer, Elkader; King & Plager, Grundy Center; Wm. Lentz, Ankeny; Loveland Stock Farm, Mt. Pleasant; Chas. E. Lyden, Manning; D. C. Lonergan & Sons, Florence, Nebraska; Hubert Meyer, Stacyville; H. M. Meneough, Grimes; G. F. Marshall & Sons, Monroe; Marshman & Comfort, Hubbard; J. N. Mullaney, Waterloo; J. T. Molloy & Son, Albion; Minear & May, Victor; O. R. Marks, Adel; R. G. Miehe, Peosta; Meyer Bros. & Parkert, Hooper, Nebraska; Isaac Overton, Knoxville; O. E. Perry, Gilman; P. A. Parmenter, Paralta; D. H. Paul, Laurel; Chas. Pfander, Clarinda; John H. Roll & Son, Coin; Ridgeway Farms, Blanchard; Fred G. Reis, Indianola; I. M. Reed & Son, Oskaloosa; Amasa Roberts, Bonaparte; Lawrence Rierson, Nevada; Chas. E. Smith, and W. L. Willey, Menlo; Fred Sievers, Audubon; John Schneider, Remsen; Marion Spear, Wellman; Mark I. Shaw, Monroe; Silvis H. Stamm, Orillia; F. O. Storrs, Sibley; A. D. Severe, Dows; H. A. Tessman, Ross; Willard W. Watters, Iowa City; W. L. Willey, Menlo; Wyatt, South & Hagedon, Manning; Warren & Bates, Guthrie Center; Russell R. Wheeler, Exira; S. C. Wyckoff, Kellerton.

POLAND CHINA.

JUDGE........................THOMAS SHATTUCK, Hastings, Nebraska.

Aged Boar—First, H. Fesenmeyer, on F's Big Jones, 84795; second, A. D. Severe, on A. Jumbo; third, Henry B. Duncan, on Long Prize, 88441; fourth, Anderson Bros., on Iowa Standard, 311093; fifth, O. E. Perry, on Iowa Giant 2nd, 283757; sixth, W. D. Jones, on Smooth Big Joe, 271075; seventh, H. A. Tessman, on Smooth Jones, 300705.

Senior Yearling Boar—First, Warren & Bates, on Propeller, 91567; second, Loveland Stock Farm, on Loveland's Big Bob, 341851; third, W. C. Jack

& Son, on Iowa Wonder, 311205; fourth, F. O. Storrs, on Demonstrator; fifth, Nels C. Jensen & Son, on Sultan, 330691; sixth, William Carey, on Highmore; seventh, Russell L. Wheeler, on Big Orange.

Junior Yearling Boar—First, Ridgeway Farms, on Bernice Jones, 94520; second, A. Hanson, on Big S. Jones; third, Fred Sievers, on Big Jack, on 341855; fourth, Bell Bros., on Col. Fred; fifth, Henry Dorr, on Evergreen Model, 312655; sixth, C. W. Crees, on Happy Giant, 97591; seventh, Meyer Bros. & Packert, on Big Cornhusker, 313341.

Senior Boar Pig—First, Henry Dorr, on Black Omaha, 354115; second, S. C. Wyckoff, on Chief Improver, 350209; third, M. A. Dowling, on Dowling's Prospect, 351671; fourth, D. H. Paul, on Model Price, 353491; fifth, Joe Kramer, on King Soll, 353925; sixth, M. A. Dowling, on D's Prospect, 351673.

Junior Boar Pig—First, M. A. Dowling; second, M. A. Dowling; third, Henry Dorr, on Omaha's Equal; fourth, Wyatt, South & Hazedom, on Big Giant; fifth, S. I. Farlow; sixth, I. J. Conrad; seventh, John Schmieder.

Aged Sow—First, Meyer Bros. & Packert, on Miss Bob Wonder, 623286; second, Fred Sievers, on Orphan Maid, 611192; third, Drewelow Bros., on Price Maid 2nd, 646660; fourth, Fred Sievers, on Wonder Lucy, 652336; fifth, Harry B. Duncan, on Long Mabel, 204962; sixth, H. M. Meneaugh, on Lady Profit, 672552; seventh, Nels C. Jensen & Sons, on Jr. Model, 822636.

F.'S BIG JONES

Grand Champion Poland China Boar. H. Fessenmeyer, Clarinda, Iowa.

Senior Yearling Sow—First, Meyer Bros. & Parkert, on Nancy Masterpiece, 815560; second, John H. Roll & Son, on Roll's Queen, 24092; third, Marshman & Comfort, on Miss Orange, 723858; fourth, Marshman & Comfort, on Matchless Miss, 723860; fifth, Loveland Stock Farm, on Miss Boulder 2; sixth, S. L. Farlow, on Queen's Lady 4, 822996; seventh, P. A. Parmenter, on P. A.'s Miss Jones, 741048.

Junior Yearling Sow—First, M. A. Dowling, on May Orange, 719006; second, Henry Dorr, on Evergreen Maud, 788910; third, Fred Sievers, on

King Lady Jones, 719638; fourth, Meyer Bros. & Packert, on Beverly Bob, 803952; fifth, H. B. Floto, on Maxine's Fashion, 787852; sixth, A. D. Severe, on Miss Wonder 1st, 787460; seventh, A. D. Severe, on Miss Wonder 2nd, 787462.

Senior Sow Pig—First, Henry Dorr, on Evergreen Hutch, 826442; second, Willard W. Watters, on Fashion Girl, 758660; third, M. A. Dowling, on Prospect Belle, 819724; fourth, H. B. Floto, on Pine's Show Lady, 823432; fifth, Henry Dorr, on Evergreen Hutch 2nd, 826444; sixth, Marion Spear, on Spear Choice; seventh, G. F. Marshall & Son, on Giantess 2nd, 823880.

Junior Sow Pig—First, M. A. Dowling; second, D. H. Paul, on Matchless H. 3rd, 824934; third, Loveland Stock Farm, on Josie Boulder; fourth, D. H. Paul, on Matchless H. 4th, 825758; fifth, M. A. Dowling; sixth, I. J. Conrad; seventh, Joe Kramer, on Royal Maid, 825930.

Senior Champion Boar—H. Fesenmeyer, on F's Big Jones, 84795.

Senior Champion Sow—Meyers Bros. & Parkert, on Miss Bob Wonder, 623286.

Junior Champion Boar—M. A. Dowling.

Junior Champion Sow—M. A. Dowling.

Grand Champion Boar, Any Age—First, H. Fesenmeyer, on F's Big Jones, 84795.

Grand Champion Sow, Any Age—First, Meyer Bros. & Parkert, on Miss Bob Wonder, 623286.

Aged Herd, Owned by Exhibitor—First, Fred Sievers; second, Meyer Bros. & Parkert; third, A. D. Severe; fourth, Nels C. Jensen & Sons.

Aged Herd Owned and Bred by Exhibitor—First, Fred Sievers; second, Meyer Bros. & Parkert; third, Nels C. Jensen & Sons.

Young Herd, Owned by Exhibitor—First, M. A. Dowling; second, Henry Dorr; third, W. D. Jones; fourth, M. A. Dowling; fifth, D. H. Paul; sixth, I. J. Conrad; seventh, Joe Kramer.

Young Herd, Owned and Bred by Exhibitor—First, M. A. Dowling; second, Henry Dorr; third, M. A. Dowling; fourth, D. H. Paul; fifth, I. J. Conrad.

Get of Sire—First, M. A. Dowling; second, Henry Dorr; third, W. D. Jones; fourth, P. A. Parmenter; fifth, M. A. Dowling; sixth, D. H. Paul; seventh, Joe Kramer.

Produce of Dam—First, M. A. Dowling; second, Henry Dorr; third, M. A. Dowling; fourth, W. D. Jones; fifth, P. A. Parmenter; sixth, D. H. Paul; seventh, A. D. Severe.

JUNIOR YEARLING FUTURITY MANAGED AND GUARANTEED BY THE AMERICAN POLAND CHINA RECORD ASSOCIATION.

Boars—First, Andrew Hansen, on Big Smooth Jones, 312099; second, Fred Sievers, on Big Jack, 341885; third, Henry Dorr, on Evergreen Model, 312655; fourth, Isaac Overton, on Highball, 338037; fifth, Nels C. Jensen & Sons, on The Admiral, 312101; sixth, Joe Kramer, on Kramers Black Tirum, 311505.

Sows—First, M. A. Dowling, on May Orange, 719006; second, Henry Dorr, on Evergreen Maud, 788910; third, A. D. Severe, on Miss Wonder 1st, 787460; fourth, A. D. Severe, on Miss Wonder 2nd, 787462; fifth, Fred Sievers, on Jacks Model Maid, 782462; sixth, Fred G. Reis, on Queen Ann, 718260.

Senior Boar Pig—First, Henry Dorr, on Black Omaha, 354115; second, M. A. Dowling, on Dowling's Prospect, 351671; third, D. H. Paul, on Model Price, 355491; fourth, Joe Kramer, on King Soll, 353925; fifth, M. A. Dowling, on D's Prospect, 351673; sixth, S. L. Farlow, on Perfect Orange, 352795.

Senior Sow Pig—First, Henry Dorr, on Evergreen Hutch, 826442; second, W. W. Watters, on Fashion Girl, 758660; third, M. A. Dowling, on Prospect

Belle, 819724; fourth, Henry Dorr, on Evergreen Hutch 2nd, 826444; fifth, G. F. Marshall & Sons, on Wonder Giantess, 823876; sixth, M. A. Dowling, on Prospect Belle 1st, 819726.

Junior Boar Pig—First, M. A. Dowling, on Valley Rainbow, 352761; second, M. A. Dowling, on Rainbow Boy, 352759; third, Henry Dorr, on Omaha's Equal, 354771; fourth, I. J. Conrad, on Victory Boy, 353723; fifth, John Schmieder, on Big Boy, 354245; sixth, Anderson Bros., on The Ranger, 354649; seventh, I. J. Conrad, on Advancer Boy, 353711; eighth, Joe Kramer, on Expansion Wonder, 354925.

Junior Sow Pig—First, M. A. Dowling, on Yankee Girl, 822848; second, D. H. Paul, on Matchless H. 1st, 824928; third, Loveland Stock Farm, on Boulders Orange 2nd, 827678; fourth, D. H. Paul, on Matchless H. 2nd, 824930; fifth, M. A. Dowling, on Yankee Girl 1st, 822850; sixth, I. J. Conrad, on Victory Maid 2nd, 825490; seventh, Joe Kramer, on Royal Maid, 825930; eighth, I. J. Conrad, on Victory Maid, 825488.

Litters of Four—Junior Pigs—First, M. A. Dowling, on Orange Queen, 595192; second, M. A. Dowling, on Orange Blossom, 595202; third, D. H. Paul, on Matchless H. 2nd, 709220; fourth, Henry Dorr, on Dorr's Choice, 639619; fifth, I. J. Conrad, on Matchless A, 681490; sixth, Anderson Bros., on Miss Joe, 692954; seventh, H. B. Floto, on Maxine Floto, 758794; eighth, Loveland Stock Farm, on Boulders Orange, 816892.

SPOTTED POLAND CHINA.

EXHIBITORS—R. W. Davisson, Wellman; Oscar Dahlgren, Selma; Fry & Shaver, Iowa City; Reg. Hermanstouffer, Sigourney; A. F. Herndon, Audubon; J. R. Lawson, Ravenwood, Missouri; E. J. Paul, Wellman; Shaver & Fry, Kalona; E. A. Smith, Wellman; Taylor & Taylor, What Cheer.

JUDGE............................L. R. MC CLARON, Braddyville, Iowa.

Aged Boar—First, Taylor & Taylor, on Arch Back King, 11419; second, Shaver & Fry, on Spotted Arch Champion, 6339.

Senior Yearling Boar—First, Taylor & Taylor, on Duke; second, Shaver & Fry, on Real Spot; third, Fry & Shaver, on Big Bone 2nd, 10407.

Junior Yearling Boar—First, Tayor & Taylor, on Wise Royal Prince, 10573; second, Taylor & Taylor, on Taylor's Model, 16803; third, Fry & Shaver, on Liberty Bond, 11387.

Senior Boar Pig—First, Taylor & Taylor, on Taylor's Choice, 16939; second, Fry & Shaver, on O. K.'s Model, 18305; third, Taylor & Taylor, on King George, 15923; fourth, Shaver & Fry, on S. & F. King, 16893; fifth, A. F. Herndon, on Caddock, 18423; sixth, G. R. Hermanstouffer, on Silver Tips.

Junior Boar Pig—First, Taylor & Taylor; second, Shaver & Fry; third, Oscar Dahlgren; fourth, Oscar Dahlgren; fifth, Fry & Shaver, on English Model; sixth, Fry & Shaver, on English Type; seventh, Shaver & Fry.

Aged Sow—First, Taylor & Taylor, on Victoria G. 17776; second, Shaver & Fry, on Obena, 31st, 15738; third, Fry & Shaver, on Sunny Spot, 8906; fourth, Taylor & Taylor, on Ruberta 12th, 9896; fifth, A. F. Herndon, on Spotted Beauty, 21924.

Senior Yearling Sow—First, Shaver & Fry, on Kind, That Tells, 27370; second, Fry & Shaver, on American Beauty 1st., 26436; third, Taylor & Taylor, on Art Lineal Giantess, 46216; fourth, Shaver & Fry; fifth, Taylor & Taylor, on Taylor's Queen, 30876; sixth, Fry & Shaver, on O. J. K.'s Queen; seventh, G. R. Hermanstouffer, on Keswick Girl.

Junior Yearling Sow—First, Taylor & Taylor, on Advertisers Sister, 33308; second, G. R. Hermanstouffer, on Peggy.

Senior Sow Pig—First, Taylor & Taylor, on Taylor's Giantess, 46232; second, Shaver & Fry, on English Obena, 43290; third, Fry & Shaver, on O. J. K.'s Lady, 47284; fourth, Shaver & Fry, on Obena English, 43288;

fifth, Fry & Shaver, on O. J. K.'s Queen, 47286; sixth, Taylor & Taylor, on Miss Mayo, 43420; seventh, G. R. Hermanstouffer, on Pretty May, 48462.

Junior Sow Pig—First, Shaver & Fry; second, Fry & Shaver, on Pride of England; third, Taylor & Taylor; fourth, Fry & Shaver, on Queen of England Again; fifth, Oscar Dahlgren; sixth, Shaver & Fry; seventh, E. J. Paul.

Senior Champion Boar—Taylor & Taylor, on Duke.

Senior Champion Sow—Taylor & Taylor, on Advertisers Sister.

Junior Champion Boar—Taylor & Taylor.

Junior Champion Sow—Shaver & Fry, on English Lady.

Grand Champion Boar, Any Age—Taylor & Taylor, on Duke.

DUKE

Senior and Grand Champion Spotted Poland China Boar. Taylor & Taylor, What Cheer, Iowa.

Grand Champion Sow, Any Age—Taylor & Taylor, on Advertisers Sister.

Aged Herd Owned by Exhibitor—First, Taylor & Taylor; second, Shaver & Fry; third, Fry & Shaver.

Young Herd Owned by Exhibitor—First, Shaver & Fry; second, Taylor & Taylor, third, Fry & Shaver; fourth, Oscar Dahlgren; fifth, E. J. Paul; sixth, E. A. Smith.

Young Herd Owned and Bred by Exhibitor—First, Shaver & Fry; second, Fry and Shaver; third, Oscar Dahlgren; fourth, Shaver & Fry; fifth, E. J. Paul.

Get of Sire—Shaver & Fry; second, R. W. Davisson; third, Fry & Shaver; fourth, Fry & Shaver; fifth, E. J. Paul; sixth, E. A. Smith.

Produce of Dam—First, R. W. Davisson; second, Fry & Shaver; third, Fry & Shaver; fourth, Shaver & Fry; fifth, E. A. Smith.

DUROC JERSEY.

Exhibitors—A. P. Alsin, Boone and G. M. Longhenry, Stratford; Frank Ballard, North English; F. B. Butterfield, Ankeny; Chas. Baughan, Hedrick; D. Birt, Auburn; Bray & Jackson, Grinnell; Fred Bonnesen, Kimballton; H. I.

Branson, West Branch; Chas. S. Crawford, Indianola; M. C. Cramer & Son, Monroe; J. W. Cartwright, Burlington; W. S. Chandler, Delta; Roy Demory, Indianola; Economy Stock Farm, Shenandoah; George Eggert, Newton; A. C. Flaugh & Son, Newton; C. W. Graham, Jr., Grimes; J. D. Gates & Sons, Ravenwood, Missouri; A. J. Grotenhuis & Sons, Sioux Center; F. E. Humphreys, North English; Jas. J. Horr, Mechanicsville; J. E. Hester, Earlham; E. J. Hawker, West Liberty; Albert Hyzer, Storm Lake; Bert Holmes, Muscatine; J. T. Holmes, Monticello; James L. Harper, Ames; C. B. Jarnagin & Son, Monroe; Sofus D. Jensen, West Branch; J. P. Horgensen, Elk Horn; John Justice, Ankeny; Fred Knop, Charter Oak; John Krebs, Riverside; F. T. Lengeman, Coon Rapids; G. M. Longhenry, Stratford; Grant Lynn & Sons, Spirit Lake; Emil Laurenz, Algona; W. W. Lockridge, North English; O. S. & G. W. Mudorf, Griswold; E. A. Morris, Webster City; Mueller Bros., Cumberland; Jos H. Mauer, Stacyville; J. J. Merfeld & Sons, Marble Rock; Herbert W. Mumford, Ann Arbor, Michigan; Arthur E. Mallory, Hampton; B. C. Marts, Hampton; McKee Bros., Creston; E. A. McCord, Collins; R. G. McDuff, Monroe; J. G. McQuilkin, La Porte City; D. Nauman, West Liberty; G. W. Perkins, Farragut; E. W. Peck, Greenfield; W. M. Putnam, Tecumseh, Nebraska; E. M. Richardson, DeWitt, Nebraska; Ransier & Seid, Independence; L. H. Rinner, Noble; Ben F. Reeves, Guthrie Center; Elmer Reed, Ames; H. M. Raub, Muscatine; John Raskamp, Kanawha; Shepard & Freers, Muscatine; G. O. Satre, Stanhope; Walter Sargent, Mitchellville; Madison Spencer, Audubon; W. B. Shaw, Monroe; E. A. Thompson, Storm Lake; J. C. Tallman, Monteith; Roy Trego, Cumberland; J. C. Vipond, Algona; R. J. Worthington, Cumberland; Grant White, Afton; Henry Westra, Hull; Williams Bros., Redfield; Whitmore Bros., Lyons, Wisconsin; J. D. Waltemeyer, Melbourne; G. A. Woods, Mechanicsville; O. E. Wilcox, Deep River; J. R. Walker, Waterloo; John Waldron, Elgin.

JUDGE.................................H. H. KILDEE, Ames, Iowa.

Aged Boar—First, G. A. Woods, on Royal Pathfinder, 270991; second, J. D. Waltemeyer & Son; third, A. E. Mallory, on Col. Trailfinder, 235431; fourth, E. H. Carpenter; fifth, Madison Spencer, on Jack Orion, 219017; sixth, J. R. Walker, on Pathfinder Type, 143087; seventh, R. G. McDuff, on J. D.'s Wonder, 260625.

Senior Yearling Boar—First, Mueller Bros., on Orion Sensation, 268981; second, W. M. Putnam & Sons, on Demonstrator, 305423; third, A. P. Alsin, on Model Wonder, 262547; fourth, A. E. Mallory, on Marion's Wonder Again, 273647; fifth, J. J. Merfeld & Son, on Giant Wonder I Am, 287617; sixth, O. S. & G. W. Mundorf, on Big Model, 258637; seventh, A. Zellmer, on Grand Model Jr., 292349.

Junior Yearling Boar—First, G. O. Satre, on Giant Wonder I Am, 276489; second, Emil Laureng, on King Orions Wonder, 304369; third, G. O. Satre, on Sensation Surprise, 285149; fourth, W. S. Chandler, on Wins Big Orion, 307409; fifth, E. O. Morris, on Select Aviator, 280461; sixth, G. W. Perkins & Son, on Orion Jacks King; seventh, John Roskamt, on Giant Reformer, 264885.

Senior Boar Pig—First, Jas. Brockway & Co., on High Top Orion, 303515; second, R. G. McDuff, on I Am a Wonder, 307951; third, R. G. McDuff, on Joe Orion E. 310011; fourth, R. J. Worthington, on Critic's Model, 302969; fifth, C. A. Zellmer; sixth, Roy Demory, on Long Orion; seventh, J. W. Courtright, on Orion Cherry Chief, 151679.

Junior Boar Pig—First, J. D. Waltemeyer & Son; second, Madison Spencer; third, Madison Spencer; fourth, J. D. Waltemeyer & Son; fifth, E. A. Thompson, on Giant Gano; sixth, R. G. McDuff, on Pathfinder B. 304717; seventh, G. W. Perkins & Son.

Aged Sow—First, W. M. Putnam & Sons; second, R. G. McDuff, on Proud Col. Lady, 450508; third, B. C. Marts, on Big Lady Vie, 610084; fourth, Williams Bros., on Taxpayer's Jane, 658530; fifth, E. A. Thompson, on Lady Jumbo, 685430.

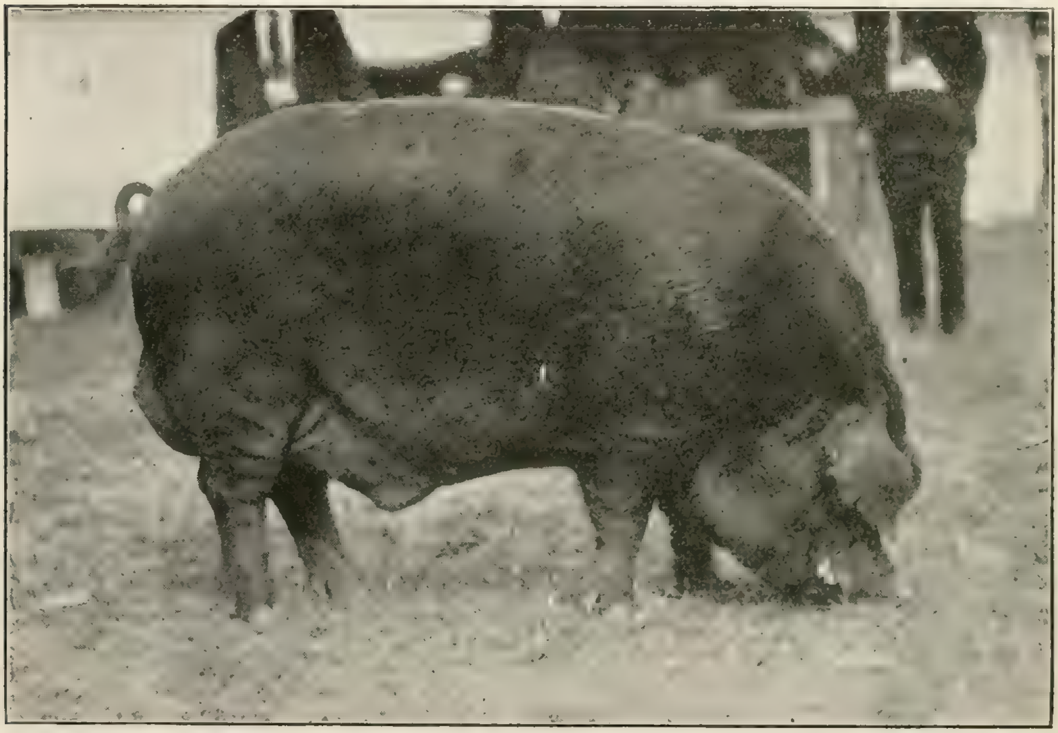
Senior Yearling Sow—First, O. S. & G. W. Mundorf, on Critic's Model 1st, 653184; second, A. E. Mallory, on Select Queen, 786490; third, W. M. Putnam

& Sons, fourth, G. A. Woods, on Cherry Kings Beauty, 638210; fifth, A. E. Mallory, on Marion's Lady, 307381; sixth, R. G. McDuff; seventh, Williams Bros., on Nora Sensation 4th, 773602.

Junior Yearling Sow—First, Ahrens Bros.; second, J. R. Walker, on Sensation Orion Lady, 663190; third, R. G. McDuff, on Critic's Orion Lady, 792618; fourth, Ben F. Reeves, on Pathfinder's Defendress, 782846; fifth, O. S. & G. W. Mundorf, on Rose Model, 663042; sixth, A. J. Grotenhius & Sons, on Henriette's Ideal; seventh, H. J. Branson, on Verns Lucy, 787356.

Senior Sow Pig—First, J. R. Walker, on Model's Top Lady; second, R. G. McDuff, on Orion Lady 10th, 792620; third, Jas. L. Harper & Son, on Double Sensation Lady, 787574; fourth, W. M. Putnam & Sons; fifth, Albert Hyzer, on Kings Winning Lady; sixth, R. G. McDuff, on Orion Lady 11th, 792622; seventh, T. J. Current, on A. Pathfinder Lady, 787684.

Junior Sow Pig—First, J. D. Waltemeyer & Son; second, Madison Spencer; third, J. D. Waltemeyer; fourth, E. A. McCord; fifth, Madison Spencer; sixth, R. G. McDuff, on Pathfinder Lilly; seventh, J. W. Courtright, on Jacks Queen Orion, 348764.



GIANT WONDER I AM

Junior and Grand Champion Duroc Jersey Boar. G. O. Satre, Stanhope, Iowa.

Senior Champion Boar—First, G. O. Satre, on Giant Wonder I Am.

Senior Champion Sow—Putnam & Sons, on Pathfinder's Queen.

Junior Champion Boar—J. D. Waltemeyer & Sons, on Choice Wonder 3rd, 310353.

Junior Champion Sow—J. R. Walker, on Models Top Lady.

Grand Champion Boar, Any Age—G. O. Satre, on Giant Wonder I Am.

Grand Champion Sow, Any Age—W. M. Putnam & Sons' on Pathfinder's Queen.

Aged Herd, Owned by Exhibitor—First, W. M. Putnam & Sons; second, A. E. Mallory; third, R. G. McDuff; fourth, O. S. & G. W. Mundorf; fifth, Ahrens Bros.; sixth, E. A. Thompson; seventh, A. J. Grotenhius & Sons.

Aged Herd, Owned and Bred by Exhibitor—First, A. E. Mallory; second, E. A. Thompson.

Young Herd Owned by Exhibitor—First, J. D. Waltemeyer & Son; second, Madison Spencer; third, R. G. McDuff; fourth, J. R. Walker; fifth, Madison Spencer; sixth, G. M. Longhenry; seventh, A. P. Alsin.

Get of Sire—First, W. M. Putnam & Son; second, J. D. Waltemeyer & Son; third, Madison Spencer; fourth, J. D. Waltemeyer & Son; fifth, J. R. Walker; sixth, E. A. Thompson.

Produce of Dam—First, J. D. Waltemeyer & Son; second, Madison Spencer; third, J. D. Waltemeyer & Son; fourth, J. R. Walker; fifth, E. A. Thompson; sixth, R. G. McDuff; seventh, Madison Spencer.

DUROC JERSEY FUTURITY PRIZES.
MANAGED AND GUARANTEED BY THE NATIONAL DUROC JERSEY RECORD ASSOCIATION.

Boars—First, J. D. Waltemeyer & Son, on Choice Wonder 3rd, 310353; second, M. Spencer, on Prince Orion, 309155; third, M. Spencer, on Sensation King, 309159; fourth, J. D. Waltemeyer & Son, on Choice Wonder, 310449; fifth, J. D. Waltemeyer & Son, on Choice Wonder 1st, 310451; sixth, R. G. McDuff, on Widles Orion 2nd, 308873; seventh, D. Nauman & Son, on Big Orion, 307639; eighth, R. G. McDuff, on Widles Orion 3rd, 308875.

Sows—First, J. D. Waltemeyer & Son, on Lady Wonder 2nd, 793546; second, M. Spencer, on Sensation Maid, 790716; 3rd, J. D. Waltemeyer & Son, on Lady Wonder 3rd, 793548; fourth, E. A. McCord, on Hawkeye Lady 18th, 788540; fifth, M. Spencer, on Sensation Maid 2nd, 790718; sixth, R. G. McDuff, on Big Lucy 2nd, 790186; seventh, J. W. Cartwright, on Giant Maggie, 790144; eighth, Frank Ballard, on Miss Proud, 784022.

Spring Pigs, Litters of Four—First, J. D. Waltemeyer & Son; second, M. Spencer; third, J. D. Waltemeyer & Son; fourth, M. Spencer; fifth, J. R. Walker; sixth, A. P. Alsin; seventh, G. A. Woods; eighth, E. A. McCord.

CHESTER WHITE.

EXHIBITORS— A. D. Brenneman, Cedar Rapids; B. M. Boyer & Sons, Farmington; L. S. Barnes, West Liberty; Geo. L. Butterfield, Knoxville; C. F. Brown, Webster City; John Brauchle, Ft. Dodge; Homer Carmichael, Webster City; R. B. Craft, Zearing; C. E. Correll, Adair; John P. Coulson, Storm Lake; W. H. Dunbar, Jefferson; A. E. Dennis, Kilduff; Davidson & Willett, Brooklyn; Ed F. Evans, Webster City; Carl Glasnappe, Lytton; Gallentine Bros., Marshalltown; L. W. Harkins, Menlo; F. E. Humphreys, North English; Leonard Heisel & Son, Cedar Rapids; James K. Helmick & Son, Columbus Junction; C. W. Halstead, Ames; M. P. Herbert, Atlantic; Art Jeffers, Murray; C. E. Longfellow, Bedford; Phillip Lenz, Lone Tree; Arthur Mosse, Leavenworth, Kansas; Will Michael, Selma; Lou McLain, North English; W. A. McMahon, West Liberty; Roy McWilliams, Grand Junction; J. H. McAnan, Cameron, Missouri; E. L. Nagel & Son, Deep River; John Perry, Selma; R. H. Rockafellow, West Liberty; C. S. Rock, West Liberty; J. L. Stittsworth, Knoxville; Otto Schouboe, Harlan; Arthur Spear, Wellman; L. V. Vanness, Newton; Bruce R. Vale, Bonaparte; Ivor A. Whitted, Monroe; Wm. A. Whitted, Monroe; Leonard Willey, Menlo; R. E. Williams, Iowa City.

JUDGE..........................CHAS. A. MARKER, Auburn, Illinois.

Aged Boar—First, B. M. Boyer & Sons, on Prince Big Bone, 43569; second, Jas. K. Helmick & Son, on Anak, 35119; third, R. E. Williams, on Valley Chief, 50959; fourth, J. H. McAnan, on Model's Giant, 41991; fifth, R. B. Craft, on Rajah's Giant, 51763; sixth, Bruce R. Vale, on Extravagance, 41925; seventh, Stiltsworth, J. L., 46753.

Senior Yearling Boar—First, B. M. Boyer & Sons, on Col. Wykoff, 54313; second, Arthur Mosse, on Don Bolshevik, 62727; third, Tory McWilliams, on Highland Illustrator, 55423; fourth, Eli Crom, on Big Bone.

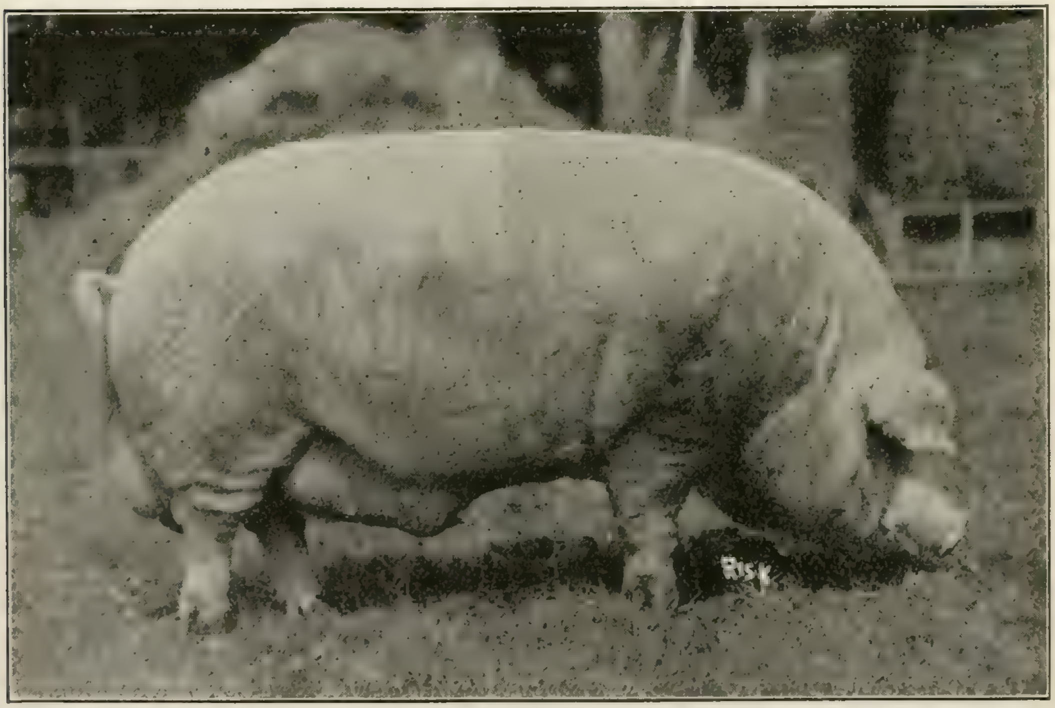
Junior Yearling Boar—First, B. M. Boyer & Sons, on Lengthy Prince, 65625; second, Bruce R. Vale, on Expansion Gem, 19397; third, C. E. Correll, on White Leader, 60573; fourth, B. M. Boyer & Sons, on Rajah's Monster, 65629; fifth, E. L. Nagel & Son, Nagle's Giant, 58677; sixth, Jas. K. Helmick & Son, on Anak Junior, 68733; seventh, R. E. Williams, on Champion 10 2nd, 57557.

Senior Boar Pig—First, Jas. K. Helmick & Son, on Helmick's Rest, 68537; second, Jas. K. Helmick & Son, on King Anak, 68537; third, Arthur Mosse, on Don Juniatta Wildwood 67767; fourth, J. H. McAnan, on Perfect Wing, 67561; fifth, B. M. Boyer & Sons, on Perfect Combination, 67757; sixth, E. L. Nagel & Sons, on Big Joe, 67505; seventh, J. P. Coulson, on Great Northern.

Junior Boar Pig—First, B. M. Boyer & Sons, on Big Leader, 67749; second, Gallentine Bros.; third, C. F. Brown; fourth, Homer Carmichael, on Model B; fifth, E. L. Nagel & Son, on Jumbo, 67843; sixth, E. L. Nagel & Son, on John, 67841; seventh, Leonard Willey.

Aged Sow—First, J. H. McAnan, on Miss W. P.; second, Leonard Willey, on Combination Lady, 119890; third, Arthur Spear, on Miss O. K., 125626; fourth, B. M. Boyer & Sons, on Miss Lenora B., 103058; fifth, Arthur Masse, on Dona Dorthea, 106396; sixth, John Branchle, on Juanita O. K. 44th, 101036; seventh, Leonard Willey, on Miss Industry 2nd, 119894.

Senior Yearling Sow—First, J. H. McAnan, on Emily Wing 3rd, 155372; second, Arthur Mosse, on Dona Violetta Princess 2nd, 137996; third, Bruce R. Vale, on Mona Supreme, 33968; fourth, John Brauchle, on Grace, 130160; fifth, John Brauchle, on Victoria 2nd, 121548; sixth, Geo. L. Butterfield, on Miss Lanora 13th, 124786.



PRINCE BIG BONE

Grand Champion Chester White Boar. B. M. Boyer & Sons, Farmington, Iowa.

Junior Yearling Sow—First, Gallentine Bros., on Leonora's O. K., 153468; second, C. S. Rock, on C. S. Beauty, 149418; third, A. E. Dennis, on Giant Maid, 120366; fourth, J. P. Coulson, on Eva's First; fifth, Arthur Mosse, on Dona Wildwood Rajah, 138056; sixth, E. L. Nagel & Son, on Lillian 3rd, 121910; seventh, J. P. Coulson, on Eva's 2nd.

Senior Sow Pig—First, B. M. Boyer & Sons, on Plymouth Princess, 149782; second, M. A. McMahon, on Beautiful Doll, 150876; third, Arthur Mosse, on Dona Charlotte Wildwood, 155946; fourth, B. M. Boyer & Sons, on Plymouth Princess 2nd, 149784; fifth, Jas. K. Helmick & Son, on Marjory, 157296; sixth, Gallentine Bros., on Sensation's Princess 153466; seventh, John Brauchle, on Mable Sensation.

Junior Sow Pig—First, B. M. Boyer & Sons, on Leading Lady, 155868; second and third, Leonard Willey; fourth, R. B. Craft; fifth, Chas. F. Brown; sixth, W. A. McMahon, on Ruth's Delight, 155954; seventh, A. E. Dennis, on Betty.

Senior Champion Boar—B. M. Boyer & Sons, on Prince Big Bone.

Senior Champion Sow—J. H. McAnan, on Miss W. P.

Junior Champion Boar—J. K. Helmick & Son, on Helmick's Best.

Junior Champion Sow—B. M. Boyer & Son, on Plymouth Princess.

Grand Champion Boar, Any Age—B. M. Boyer & Sons, on Prince Big Bone.

Grand Champion Sow, Any Age—J. H. McAnan, on Miss W. P.

Aged Herd, Owned by Exhibitor—First, B. M. Boyer & Sons; second, J. H. McAnan; third, Arthur Mosse; fourth, Arthur Spear; fifth, Bruce R. Vale.

Aged Herd, Owned by Exhibitor—First, B. M. Boyer & Sons; second, Jas. K. Helmick & Son; third, Arthur Mosse.

Young Herd, Owned and Bred by Exhibitor—First, Jas. K. Helmick & Son; second, B. M. Boyer & Sons; third, Arthur Mosse; fourth, E. L. Nagel & Son; fifth, Gallentine Bros.; sixth, Leonard Willey; seventh, J. H. McAnan.

Get of Sire—First, B. M. Boyer & Sons; second, Jas. K. Helmick & Son; third, B. M. Boyer & Sons; fourth, Arthur Mosse; fifth, E. L. Nagel & Son; sixth, Gallentine Bros.; seventh, J. H. McAnan.

Produce of Dam—First, Jas. K. Helmick & Son; second, B. M. Boyer & Sons; third, B. M. Boyer & Sons; fourth, E. L. Nagel & Son; fifth, Chas. F. Brown; sixth, Gallentine Bros.; seventh, Arthur Mosse.

CHESTER WHITE FUTURITY PRIZES.

GUARANTEED BY THE CHESTER WHITE RECORD ASSOCIATION.

Fall Pigs, Boars—First, J. K. Helmick & Son, on Helmick's Best, 68537; second, J. K. Helmick & Son, on King Anak, 68539; third, J. H. McAnan, on Perfect Wing, 67561; fourth, B. M. Boyer & Sons, on Perfect Combination, 67757; fifth, E. L. Nagel & Son, on Big Joe, 67505.

Fall Pigs, Sows—First, B. M. Boyer & Sons, on Plymouth Princess, 149782; second, W. H. McMahon, on Beautiful Dan; third, B. M. Boyer & Sons, on Plymouth Princess 2nd; fourth, J. K. Helmick & Son, on Marjory, 157294; fifth, J. H. McAnan, on Perfecta Wing, 155386.

Spring Pigs, Boars—First, B. M. Boyer & Sons, on Big Leader, 67749; second, C. F. Brown, on Highland Chief, 68893; third, E. L. Nagel & Son, on Jumbo, 67843; fourth, E. L. Nagel & Son, on John, 67841; fifth, Leonard Heisel & Son, on Myers' Model Jr., 67695; sixth, C. F. Brown, on Chief Prospector, 68895; seventh, W. H. McMahon, on Ruth's Sensation; eighth, R. B. Craft, on Big Rajah, 68855.

Spring Pigs, Sows—First, B. M. Boyer & Sons, on Leading Lady, 155868; second, R. B. Craft, on Lenora Best, 157890; third, C. F. Brown, on Model Girl, 157956; fourth, W. A. McMahon, on Ruth's Delight; fifth, A. E. Dennis, on Betty, 155910; sixth, R. E. Williams, on Mary L., 156804; seventh, E. L. Nagel & Son, on Janet, 156072; eighth, A. E. Dennis, on Betsy, 155912.

Spring Pigs, Litters of Four—First, B. M. Boyer & Sons; second, C. F. Brown; third, A. E. Dennis; fourth, W. A. McMahon; fifth, E. L. Nagel & Son; sixth, Geo. L. Butterfield; seventh, B. M. Boyer & Sons; eighth, John Brauchle.

BERKSHIRE.

Exhibitors—C. F. Curtiss, Ames; T. A. Harris & Son, Lamine, Missouri; Iowana Farms, Davenport; J. H. Nickel & Sons, Arenzville, Illinois; Whitmore Bros., Lyons, Wisconsin.

Judge.................................H. H. Kildee, Ames, Iowa.

Aged Boar—First, Whitmore Bros., on Climax Premier 2nd, 226527; second, Iowana Farms, on Artful King 12th, 210780; third, Whitmore Bros., on Fannie's Duke 2nd, 272142.

Senior Yearling Boar—First, Iowana Farmers, on Iowana Artful King, 259660; second, Iowana Farms, on Iowana Peer 11th, 26895; third, T. A. Harris & Son, on Handsome Duke 17th, 254700; fourth, T. A. Harris & Son, on Handsome Duke 18th, 254233; fifth, Whitmore Bros., on Joe Aldoro, 255083.

Junior Yearling Boar—First, Iowana Farms, on Iowana Baron 48th, 259642; second, C. F. Curtiss, on Diplomat, 263000; third, J. H. Nickel & Sons on Master's Cedric 5th, 253723; fourth, T. A. Harris & Son, on Handsome Duke 46th, 269200; fifth, Iowana Farms, on Iowana Peer 9th, 268347; sixth, T. A. Harris & Son, on Handsome Duke 30th, 26350; seventh, J. H. Nickel & Sons, on Master's Cedric 4th, 253722.

Senior Boar Pig—First, C. F. Curtiss, on Ames Rival 199th, 270544; second, J. H. Nickel & Sons, on Belle's Starlight, 267555; third, J. H. Nickel & Sons, on Schoolmaster's Duke 3rd, 267556; fourth, T. A. Harris & Sons, on Handsome Duke 41st, 269233; fifth, T. A. Harris & Son, on Handsome Duke 40th, 269221; sixth, Whitmore Bros., on Emblematic's Climax, 269470.

IOWANA ARTFUL KING

Grand Champion Berkshire Boar. Iowana Farms, Davenport, Iowa.

Junior Boar Pig—First, J. H. Nickel & Sons, on Sterling's Superb 2nd, 273242; second, J. H. Nickel & Sons, on Grenadier's Bolshevik, 273251; third, Whitmore Bros.; fourth, Whitmore Bros.

Aged Sow—First, Iowana Farms, on Iowana Rose 6th, 224787; second, J. H. Nickel & Son, on Fannie Knight 2nd, 240434; third, Iowana Farms, on Iowana Lady 16th, 211811; fourth, Whitmore Bros., on Black Pet 2nd, 226529; fifth, Whitmore Bros., on Aldora's Beauty 4th, 226528; sixth, T. A. Harris & Sons, on Handsome Duchess 62nd.

Senior Yearling Sow—First, Iowana Farms, on Iowana Rose 8th, 258671;

second, Iowana Farms, on Iowana Countess 18th, 259669; third, Whitmore Bros., on Beauty Sister 5th, 255082.

Junior Yearling Sow—First, C. F. Curtiss, on Matchless Beauty 19th, 254655; second, Iowana Farms, on Iowana Lady 101st, 259615; third, T. A. Harris & Son, on Handsome Duchess 102nd, 269208; fourth, J. H. Nickel & Sons, on Grenadiers Fannie, 253709; fifth, T. A. Harris & Son, on Handsome Duchess 103rd, 269209; sixth, Iowana Farms, on Iowana Baroness 22nd, 259661; seventh, Whitmore Bros., on Handsome Pet, 273928.

Senior Sow Pig—First, J. H. Nickel & Sons, on Belle's Ideal, 267556; second, C. F. Curtiss, on Rockwood Lady 168th, 270539; third, Iowana Farms, on Iowana Peaceful 83rd, 269592; fourth, J. H. Nickel & Sons, on Schoolmaster's Miss A., 267567; fifth, Iowana Farms, on Iowana Pet 30th, 269395; sixth, Whitmore Bros., on Emblematic's Flossie 2nd, 269472; seventh, Whitmore Bros., on Emblematic's Flossie 3rd, 269473.

Junior Sow Pig—First, J. H. Nickel & Sons, on Grenadier's Reality, 273250; second, J. H. Nickel & Sons, on Belles Hapiful Lass, 273244; third, Whitmore Bros.

Senior Champion Boar—Iowana Farms, on Iowana Artful King.

Senior Champion Sow—Iowana Farms, on Iowana Rose 6th.

Junior Champion Boar—C. F. Curtiss.

Junior Champion Sow—J. H. Nickel & Sons, on Belle's Ideal.

Grand Champion Boar, Any Age—Iowana Farms, on Iowana Artful King.

Grand Champion Sow—Iowana Farms, on Iowana Rose 6th.

Aged Herd, Owned by Exhibitor—First, Iowana Farms; second, Iowana Farms; third, J. H. Nickel & Sons, fourth, Whitmore Bros.; fifth, T. A. Harris & Son; sixth, T. A. Harris & Son.

Aged Herd, Owned and Bred by Exhibitor—First, Iowana Farms; second, Iowana Farms; third, J. H. Nickel & Sons; fourth, Whitmore Bros.; fifth, T. A. Harris & Son; sixth, T. A. Harris & Son.

Young Herd, Owned by Exhibitor—First, J. H. Nickel & Sons; second, J. H. Nickel & Sons; third, Whitmore Bros.; fourth, T A. Harris & Son.

Young Herd, Owned and Bred by Exhibitor—First, J. H. Nickel & Sons; second, J. H. Nickel & Sons; third, Whitmore Bros.; fourth, T. A. Harris & Son..

Get of Sire—First, Iowana Farms; second, Iowana Farms, on Iowana Champion Peer 3rd; third, J. H. Nickel & Sons; fourth, Whitmore Bros.; fifth, J. H. Nickel & Sons; sixth, T. A. Harris & Son; seventh, T. A. Harris & Son.

Produce of Dam—First, Iowana Farms; second, J. H. Nickel & Sons; third, T. A. Harris & Son; fourth, Whitmore Bros.; fifth, T. A. Harris & Son.

HAMPSHIRE.

EXHIBITORS—W. S. Aldrich, Council Bluffs; C. S. Bratt & Son, Arapahoe, Nebraska; Boles & Bockelman, Ocheyedan; S. J. Brady, Milton; T. C. Cole, Thurman; A. H. Finnell, Hamburg; J. C. Gitthens, Amber, Oklahoma; Neri Hoskins & Sons, Cantril; K. F. Houghtaling, Grimes; E. R. Hem, Selma; E. D. Lawson, Ravenwood, Missouri; M. C. Morrison, Adelphi; Clayton Messenger, Keswick; Art Shaw, Oskaloosa; J. N. Summers, Malvern; Leo. B. Streck, Mapleton; H. E. Taylor, Dallas Center; Turner Bros., DeWitt; T. W. Timmerman, West Liberty; C. I. Ward, Cameron, Missouri; Wickfield Farm, Cantril.

JUDGE........................SIMON ALBRECHT, Tiskilwa, Illinois.

Aged Boar—First, C. I. Ward, on Gen. Pershing, 55787; second, Turner Bros., on Scottish Lad 3rd, 36735; third, T. C. Cole; fourth, Clayton Messenger, on Messenger Boy's Defender, 57977; fifth, Boles & Bockleman, on Ladie, 48049; sixth, Wickfield Farm; seventh, Art Shaw, on Longfellow Chief, 40317.

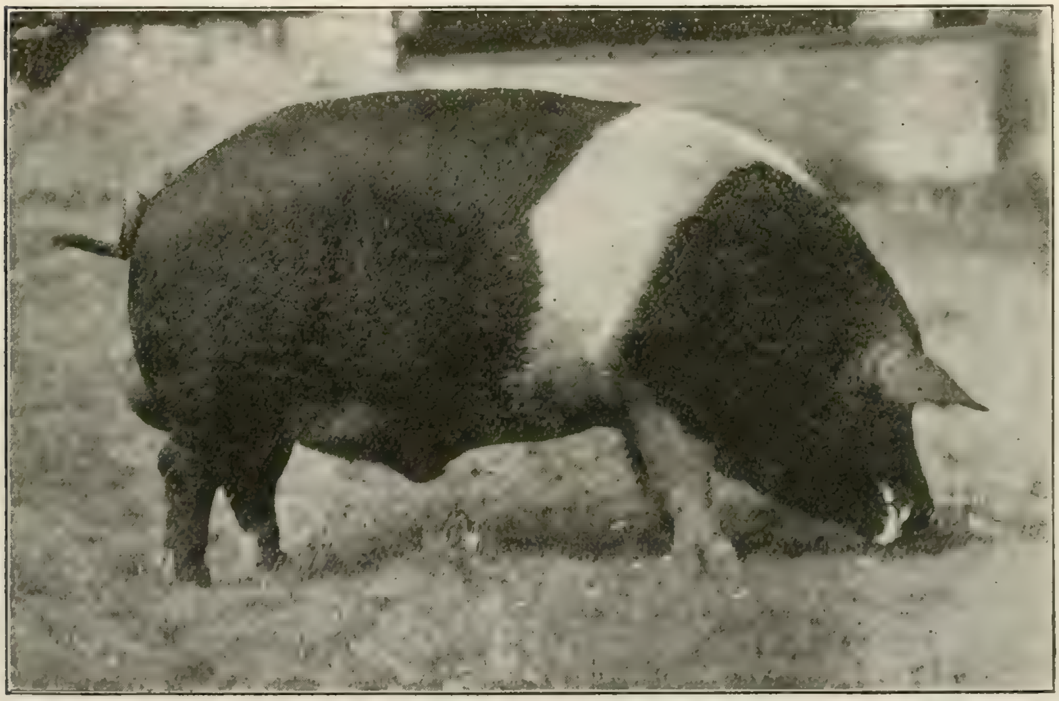
Senior Yearling Boar—First, Clayton Messenger, on Hawkeye Professor, 57985; second, Wickfield Farm; third, T. C. Cole; fourth, W. S. Aldrich, on Cherokee Pattern, Jr. 2nd, 59637; fifth, H. E. Taylor, on Cherokee Pattern Jr. 3rd, 60743; sixth, Wickfield Farm; seventh, Clayton Messenger, on Major Gilman, 66773.

Junior Yearling Boar—First, Wickfield Farm; second, C. S. Bratt & Son, on Nate, 67633; third, Clayton Messenger, on Boulder's Masterpiece, 71077; fourth, Wickfield Farm; fifth, T. C. Cole, on Choice Perfection, 60769; sixth, M. C. Morrison, on Victory Boy 5th, 71265; seventh, T. W. Timmerman, on Major Jim, 69837.

Senior Boar Pig—First, Wickfield Farm; second, E. E. Johnson; third, E. E. Johnson; fourth, Clayton Messenger, on Tipton Lad, 71083; fifth, Wickfield Farm, sixth, M. C. Morrison, on The Judge, 71263; seventh, C. I. Ward, on R. 34, 73419.

Junior Boar Pig—First, T. C. Cole, on King, 74547; second, C. S. Bratt & Son; third, T. W. Timmerman; fourth, Turner Bros., on Bob, 72823; fifth, Cedar & Johnston; sixth, M. C. Morrison; seventh, E. R. Hem, on Lookout Messenger.

Aged Sow—First, Wickfield Farm; second, Clayton Messenger, on Dortha C.; third, Wickfield Farm; fourth, C. I. Ward, on May 1st, 88864; fifth, Cedar & Johnston; sixth, Turner Bros.; seventh, Clayton Messenger, on Scottish Girl 18th, 147758.



GENERAL PERSHING

Grand Champion Hampshire Boar. C. I. Ward, Cameron, Mo.

Senior Yearling Sow—First, Clayton Messenger, on Scottish Girl 21st, 120784; second, Clayton Messenger, on Scottish Girl 20th, 120782; third, Cedar & Johnston; fourth, Turner Bros., on Midget, 128510; fifth, C. I. Ward, on Amber Sunrise, 146034; sixth, C. S. Bratt & Son, on Irene, 124808.

Junior Yearling Sow—First, Wickfield Farm; second, Clayton Messenger, on Tipton Beauty, 143348; third, Cedar & Johnston; fourth, T. W. Timmerman, on Cozy Lookout 1st, 138288; fifth, Clayton Messenger, on Scottish Lass, 143330; sixth Turner Bros., on Miss Lilly, 128348; seventh, C. I. Ward, on Silva, 138348.

Senior Sow Pig—First, Cedar & Johnston; second, Art Shaw, on Eugenia; third, Turner Bros., on Stella, 157762; fourth, Clayton Messenger, on Scottish Tip, 157928; fifth, Wickfield Farm; sixth, Wickfield Farm; seventh, W. S. Aldrich, on Pershing's Girl.

Junior Sow Pig—First, T. C. Cole, on Wickware Lady, 162090; second, Wickfield Farm; third, Clayton Messenger, on Scottish Girl 28th, 159058; fourth, C. S. Bratt & Son; fifth, W. S. Aldrich, on Aldrich Queen 1st; sixth, K. F. Houghtaling; seventh, Neri Hoskins & Sons, on Cinthea's Beauty, 158208.

Senior Champion Boar—First, C. I. Ward, on Gen. Pershing.

Senior Champion Sow—Wickfield Farm, on Tricksy Lookout.

Junior Champion Boar—Wickfield Farm, on Clansman.

Junior Champion Sow—P. P. Cedar, on Hawkeye Lady .

Grand Champion Boar, Any Age—C. I. Ward, on Gen. Pershing.

Grand Champion Sow, Any Age—Wickfield Farm, on Tricksy Lookout.

Aged Herd, Owned by Exhibitor—First, Wickfield Farm; second, Clayton Messenger; third, Clayton Messenger; fourth, C. I. Ward; fifth, Turner Bros.; sixth, Cedar & Johnston.

Aged Herd, Owned and Bred by Exhibitor—First, Wickfield Farm; second, Clayton Messenger; third, Clayton Messenger; fourth, C. I. Ward.

Young Herd, Owned by Exhibitor—First, Wickfield Farm; second, Clayton Messenger; third, T. C. Cole; fourth, Cedar & Johnston; fifth, C. S. Bratt & Son; sixth, C. I. Ward,; seventh, Cedar & Johnston.

Young Herd, Owned and Bred by Exhibitor—First, Wickfield Farm; second, Clayton Messenger; third, T. C. Cole; fourth, Cedar & Johnston; fifth, C. S. Bratt & Son; sixth, C. I. Ward; seventh, Cedar & Johnston.

Get of Sire—First, Clayton Messenger; second, Wickfield Farm; third, Clayton Messenger; fourth, Wickfield Farm; fifth, T. C. Cole; sixth, Cedar & Johnston; seventh, Cedar & Johnston.

Produce of Dam—First and second, Clayton Messenger; third, Wickfield Farm; fourth, T. C. Cole; fifth and sixth, Cedar & Johnston; seventh, Turner Bros.

MULEFOOT.

EXHIBITORS—F. S. TAYLOR, What Cheer.

JUDGE............................CHAS. A. MARKER, Auburn, Iowa.

Aged Boar—First, F. S. Taylor, on Corrector 5th, 61805.

Senior Yearling Boar—First, F. S. Taylor, on Corrector 9th, 61857.

Junior Yearling Boar—First, F. S. Taylor, on Dan Spink, 61955.

Senior Boar Pig—First, F. S. Taylor, on Corrector 15th.

Junior Boar Pig—First, F. S. Taylor; second, F. S. Taylor.

Aged Sow—First, F. S. Taylor, on Daisy 2nd, 62952; second,, F. S. Taylor, on Daisy 3rd, 62948.

Senior Yearling Sow—First, F. S. Taylor, on Correctress 4th, 63318; second, F. S. Taylor, on Correctress, 5th, 63320.

Junior Yearling Sow—First, F. S. Taylor, on Bessie Corrector; second, F. S. Taylor, on Bessie Corrector.

Senior Sow Pig—First, F. S. Taylor, on Midnight 2nd; second, F. S. Taylor, on Midnight 3rd.

Junior Sow Pig—First, F. S. Taylor; second, F. S. Taylor.

Senior Champion Boar—F. S. Taylor.

Senior Champion Sow—F. S. Taylor.

Junior Champion Boar—F. S. Taylor.

Junior Champion Sow—F. S. Taylor.

Grand Champion Boar, Any Age—F. S. Taylor.

Grand Champion Sow, Any Age—F. S. Taylor.

Aged Herd, Owned by Exhibitor—First, F. S. Taylor.

Aged Herd, Owned and Bred by Exhibitor—First, F. S. Taylor.

Young Herd, Owned by Exhibitor—First and second, F. S. Taylor.

Young Herd, Owned and Bred by Exhibitor—First and second, F. S. Taylor.

Get of Sire—First and second, F. S. Taylor.

Produce of Dam—First and second, F. S. Taylor.

LARGE YORKSHIRE.

Exhibitors—B. F. Davidson, Menlo; Merle & Bennie Davidson, Menlo; Otis Morris, Guthrie Center; W. H. Winn, Menlo.

Judge..............................Otis H. Tuttle, Norway, Iowa.

Aged Boar—First, B. F. Davidson, on Oak Lodge Sardis, 53060.

Senior Boar Pig—First, B. F. Davidson, on Deer Creek Reno 21st, 27945; second, B. F. Davidson, on Deer Creek Royal 16th, 27934; third, Otis Morris, on Fair View Boy 1st, 27772; fourth, Otis Morris, on Fair View Boy 3rd, 27774.

LIBERTY

Grand Champion Yorkshire Boar. B. F. Davidson, Menlo, Iowa.

Junior Boar Pig—First, B. F. Davidson, on Deer Creek Sardis 2nd, 27938; second, B. F. Davidson, on Deer Creek Ohio Goods, 27933; third, Merle & Bennie Davidson, on Deer Creek Vernon 12th, 27955; fourth, Merle & Bennie Davidson, on Deer Creek Remo 21st, 27959; fifth and sixth, W. H. Winn.

Aged Sow—First, B. F. Davidson, on Deer Creek Rena 6th, 25920; second, B. F. Davidson, on Deer Creek Ruby 5th, 26954; third, W. H. Winn.

Senior Yearling Sow—First, B. F. Davidson, on Deer Creek Della 17th, 26924; second, B. F. Davidson, on Deer Creek Della 18th, 26925.

Junior Yearling Sow—First, B. F. Davidson, on Deer Creek Della 24th, 27749.

Senior Sow Pig—First, B. F. Davidson, on Deer Creek Elena 17th, 27935; second, B. F. Davidson, on Deer Creek Elena 18th, 27936; third, Otis Morris, on Fair Lady 1st, 27766; fourth, Otis Morris, on Fair Lady 2nd, 27767.

Junior Sow Pig—First, B. F. Davidson, on Deer Creek Lady R. 3rd, 27940; second, B. F. Davidson, on Deer Creek Lady R. 2nd, 27939; third, Merle & Bennie Davidson, on Deer Creek Lady Ruby 15th, 27957; fourth, Merle & Bennie Davidson, on Deer Creek Rosa 5th, 27956; fifth and sixth, W. H. Winn.

Senior Champion Boar—B. F. Davidson.

Senior Champion Sow—B. F. Davidson.

Junior Champion Boar—B. F. Davidson.

Junior Champion Sow—B. F. Davidson.

Grand Champion Boar, Any Age—B. F. Davidson.

Grand Champion Sow, Any Age—B. F. Davidson.

Aged Herd, Owned by Exhibitor—First, B. F. Davidson.

Aged Herd, Owned and Bred by Exhibitor—First, B. F. Davidson.

Young Herd, Owned by Exhibitor—First, B. F. Davidson; second, Merle & Bennie Davidson; third, Otis Morris; fourth, W. H. Winn.

Young Herd, Owned and Bred by Exhibitor—First, B. F. Davidson.

Get of Sire—First, B. F. Davidson; second, Merle & Bennie Davidson; third, Otis Morris; fourth, W. H. Winn.

Produce of Dam—First, B. F. Davidson; second, Merle & Bennie Davidson; third, Otis Morris; fourth, W. H. Winn.

TAMWORTH.

EXHIBITORS—T. E. Adams, Rhodes; Propst Bros., Iowa City; Maynard B. Thomas, Iowa City; Jonas Y. Yoder, Kalona.

JUDGE..............................OTIS H. TUTTLE, Norway, Iowa.

Aged Boar—First, Maynard B. Thomas, on Glenary Fred, 23303; second, T. E. Adams, on Bert H., 19241.

Senior Yearling Boar—First, T. E. Adams, on Wonder H.; second, Propst Bros., on Sunny Jim, 22129.

Junior Yearling Boar—First, Maynard B. Thomas; second, T. E. Adams, on Zeno, 22426.

Senior Boar Pig—First, Propst Bros., on Iowa Chief 3rd, 23364; second, Propst Bros., on Iowa Long Boy, 23363; third, Jonas Y. Yoder, on Ruby Mack, 23343.

Junior Boar Pig—First, Maynard B. Thomas, on Glenary 14th, 23039; second, Maynard B. Thomas, on Glenary 16th, 23036; third, Propst Bros.; fourth, Propst Bros.

Aged Sow—First, Propst Bros. on Miss Knowle, 17461; second, Propst Bros., on Miss Knowle 2nd, 17462; third, T. E. Adams, on Princess H., 19240.

Senior Yearling Sow—First, Maynard B. Thomas, on Miss Knowle 11th, 21813; second, Maynard B. Thomas, on Miss Knowle 12th, 21814; third, Propst Bros. on Virginia, 22133.

Junior Yearling Sow—First, Maynard B. Thomas, on Glenary Pearl, 23347; second, Propst Bros., on Queen Ella, 23365.

Senior Sow Pig—First, Maynard B. Thomas, on Glenwood Evelyn, 23055; second, Propst Bros., on Ruby Queen, 23367; third, Propst Bros., on Lady Nell, 23366; fourth, Jonas Yoder, on Ruby Mae, 23344; fifth, Jonas Y. Yoder, on Ruby Ida, 23345.

Junior Sow Pig—First, Maynard B. Thomas, on Glenary 10th, 23035; second, Maynard B. Thomas, on Glenary 12th, 23037; third, Propst Bros.; fourth, Propst Bros.

Senior Champion Boar—First, Maynard B. Thomas, on Glenary Fred.

Senior Champion Sow—First, Maynard B. Thomas, on Glenary Pearl.

Junior Champion Boar—Maynard B. Thomas.

Junior Champion Sow—Maynard B. Thomas.

Grand Champion Boar, Any Age—Maynard B. Thomas, on Glenary Fred.

Grand Champion Sow, Any Age—Maynard B. Thomas, on Glenary Pearl.

Aged Herd, Owned by Exhibitor—First, Maynard B. Thomas; second, Propst Bros.

GLENARY FRED

Grand Champion Tamworth Boar. Maynard Thomas, Iowa City, Iowa.

Young Herd, Owned by Exhibitor—First, Maynard B. Thomas; second, Jonas Y. Yoder; third, Propst Bros.; fourth, Propst Bros.

Young Herd, Owned and Bred by Exhibitor—First, Maynard B. Thomas; second, Propst Bros.; third, Propst Bros.

Get of Sire—First, Maynard B. Thomas; second, T. E. Adams; third, Propst Bros.; fourth, Propst Bros.; fifth, Jonas Y. Yoder.

Produce of Dam—First, Maynard B. Thomas; second, T. E. Adams; third, Propst Bros.; fourth, Propst Bros.; fifth, Jonas Y. Yoder.

BOYS AND GIRLS PIG CLUB AND PIG DEPARTMENT.

Exhibitors—Leonard Alexander, Stanley Alexander, Sherman Brady, Carl Bauer, James Buchanan, Mydrian B. Boyer, Virgil Buchmiller, Verland Blair, Bennie Barnes, Lloyd Carpenter, Lloyd Craft, Lambert Clark, Wendell Carleson, Merrill Carlson, Donald Devotie, Maxwell O. Ehlert, Charles Ellerman, Homer Ellerman, Charles F. Elliott, Elmer Fahrenkrog, Mabel Fahrenkrog, Marvin B. Fox, John W. Fox, Dale Fox, Sidney G. Findly, Wilbur Hoskins, Leslie Hoskins, Flora Hoskins, Lester Hansen, Clarence Hansen, Mildred Hansen, Willie Hurbert, Harold Holmes, Ivan Holmes, Cecil Hugh, Magnus Johnson, Raymond Johnson, Everett Kelloway, Paul Kelloway, George Knop, Lydia Knop, Willie Krulke, Eleanor Krulke, Gilmore Lindgreen, Ben E. McClenahan, E. M. Meneough, Roy Mumpher, Albert Mumpher, Edward Melroy, Leon W.

Miller, Carroll Plager, James Ryan, Lyon L. Smith, Walter Schwyhart, George Sonquist, Lawrence Saneen, Cecil V. Strubin, Cleo Stuart, Clyde L. Stuart, Hazel Thomas, Maynard B. Thomas, Earl Tessman, Frank Willey, Stanley Willey, Stanley White, George Williamson, Jr., Carroll W. Wagner, Leslie Yaw, Oscar Zellmer, Harold Zellmer.

CHESTER WHITE DIVISION.

Chester White Pig, Either Sex—First, Willie Hurbert; second, Ray Longfellow; third, Marian B. Royer; fourth, Lloyd Craft, on Lenoria Pride; fifth, Harry Longfellow; sixth, Carl L. Bauer; seventh, James Ryan; eighth, Chas. Ellerman; ninth, Homer Ellerman.

POLAND CHINA DIVISION.

Poland China Pig, Either Sex—First, Earl Tessman; second, Maxwell O. Ehlert, on Miss Sue; third, Walter Schwyhart, on Lita Model; fourth, Carroll Plager, on Black Lady; fifth, E. M. Meneaugh, on Happy Lady; sixth, Ben McClanahan; seventh, Leland Williams; eighth, Virgil Buchmiller; ninth, Gerald Souquist, on Orange Model Belle; tenth, Raymond Johnson.

DUROC JERSEY DIVISION.

Duroc Jersey Boars—First, Lambert Clark, on Trailfinders' Model, 306895; second, Oscar Zellmer; third, Willie Grelke; fourth, Everett Kelloway; fifth, Lester Hanson; sixth, Cecil V. Streebin.

Duroc Jersey Sows—First, Harold Zellmer; second, Lydia Knop; third, Clyde L. Stuart; fourth, Cleo Stuart; fifth, Leslie Yaw; sixth, Geo. Knop; seventh, Clarence Hanson; eighth, Paul Kelloway; ninth, Elinor Greelke; tenth, Mildred Hanson.

HAMPSHIRE DIVISION.

Hampshire Boar Pig—First, John Turner, on Defender, 72825; second, Willie Turner, on Iowa Chief, 72817; third, Jennie Turner, on Bob, 72823; fourth, Leslie Hoskins; fifth, Stanley Wiley; sixth, Sidney S. Finley, on Hampshire Boar.

Hampshire Gilt—First, Flora Hoskins; second, Sherman Brady, on De Sota's Lass; third, Magnus Johnson; fourth, Lionel Smith; fifth, Leonard Alexander; sixth, Frank Willey; seventh, Stanley Alexander.

DIVISIONS 1, 2 AND 3.

Fat Hogs, Grade or Cross Bred—First, Geo. Williamson, Jr.; second, Elmer Fahrenkrog, on Iowa Boaster; third, James Buchanan; fourth, Mable Fahrenkrog, on Iowa Best; fifth, Marvin Fox; sixth, Cecil Hughes; seventh, John W. Fox; eighth, Dale Fox.

Pure Bred Sows of All Breeds—First, Harold Zellmer; second, Maxwell O. Ehlert; third, Lydia Knop; fourth, Walter Schwyhart, on Lita Model; fifth, Flora Hoskins; sixth, Carroll Plager, on Black Lady; seventh, Sherman Brody, on De Sota's Lass; eighth, Clyde L. Stuart, on Princess 2nd; ninth, Cleo Stuart, on Princess 3rd; tenth, Everett Kelloway; eleventh, Geo. Knop; twelfth, Clarence Hanson; thirteenth, John Turner; fourteenth, Magnus Johnson; fifteenth, Lawrence Sandeen; sixteenth, Mildred Hanson; seventeenth, Eleanor Greelke; eighteenth, Ivan Holmes; nineteenth, Harold Holmes.

Pure Bred Boars of All Breeds—First, Earl Tessman; second, Lambert Clark; third, John Turner; fourth, Willie Hurbert; fifth, Oscar Zellmer; sixth, Willie Greelke; seventh, Willie Turner; eighth, Roy Longfellow; ninth, Paul Kelloway; tenth, Sidney Findley.

SHEEP DEPARTMENT

SUPERINTENDENT....................CHAS. ESCHER, JR., Botna, Iowa.
JUDGE..................WILLIAM F. RENK, Sun Prairie, Wisconsin.

IOWA SWEEPSTAKES.

Best Ram, All Mutton Breeds—First, H. D. Eddingfield, 479863.

Best Ewe, All Mutton Breeds—First, H. D. Eddingfield, 475524.

MERINO CLASS B.

EXHIBITORS—A. W. Arnold, Galesville, Wisconsin; A. J. Blakely & Son, Grinnell; Chandler Bros., Kellerton; Joe W. Edgar, New London; Richards & Richards, Lodi, Wisconsin; F. F. Warner & Son, Bloomfield.

JUDGE.............................C. J. FAWCETT, Malcom, Iowa.

Ram, Two Years Old or Over—First, Richards & Richards, on William Staley, 1115; second, A. J. Blakely & Son; third, A. W. Arnold, on W. L. Cook, 431; fourth, A. J. Blakely & Son, on Moler & Lash, 451.

Ram, One Year Old and Under Two—First and second, F. F. Warner & Son; third, A. J. Blakely & Son; fourth, Richards & Richards, on W. R. Vanderwort, 908.

Ram, Under One Year—First and fourth, A. J. Blakely & Son; second and third, F. F. Warner and Son.

Ewe, Two Years Old or Over—First, F. F. Warner & Son; second, A. J. Blakely & Son; third, Richards & Richards, on W. N. Cook, 528; fourth, Joe W. Edgar, on Rails, 306.

Ewe, One Year Old and Under Two—First, A. J. Blakely & Son, 2690; second, Richards & Richards, on S. Blamer & Son, 908; third, A. J. Blakely & Son; fourth, A. W. Arnold, on S. B. & Son, 918.

Ewe Under One Year—First, A. J. Blakely & Son; second, Richards & Richards, on Richards, 27; third, Richards & Richards, on Richards, 26; fourth, Chandler Bros.

Champion Ram, Any Age—Richards & Richards.

Champion Ewe, Any Age—F. F. Warner.

Flock—First, Richards & Richards; second, A. J. Blakely & Son; third, A. W. Arnold.

Get of Sire—First, A. J. Blakely & Son; second, Chandler Bros.

IOWA SPECIALS MERINO CLASS B.

Ram, Two Years Old or Over—First, A. J. Blakely & Son, 2647.

Ram, One Year Old or Over—First, F. F. Warner & Son; second, A. J. Blakely & Son, 2675.

Ram, Under One Year—First, F. F. Warner & Son; second, F. F. Warner & Son; third, A. J. Blakely & Son.

Ewe, Two Years Old or Over—First, A. J. Blakely & Son, 2637; second, Joe W. Edgar, on Rail & Sons, 306; third, A. J. Blakely & Son, on 2637.

Ewe, One Year Old and Under Two—First, A. J. Blakely & Son, on 2683.

Ewe Under One Year—First, A. J. Blakely & Son.

Champion Ram, Any Age—First, A. J. Blakely & Son.

Champion Ewe, Any Age—First, A. J. Blakely & Son, on 2637.

Flock—First, A. J. Blakely & Son.

MERINO CLASS C.

EXHIBITORS—A. J. Blakely & Son, Grinnell; Joe W. Edgar, New London; Richards & Richards, Lodi, Wisconsin; F. F. Warner & Son, Bloomfield.

JUDGE.................................C. J. FAWCETT, Malcom, Iowa.

Ram, Two Years Old, or Over—First, F. F. Warner & Son; second, Joe W. Edgar, on Edgar's 104th; third, A. J. Blakely & Son, 2625; fourth, F. F. Warner & Son.

Ram, One Year Old and Under Two—First, Joe W. Edgar, on Edgar's, 122; second, Richards & Richards, on S. B. & Son, 1043; third, F. F. Warner & Son; fourth, F. F. Warner & Son.

Ram, Under One Year—First, Richards & Richards, on N. R. Vanderwort, 940; second, F. F. Warner & Son; third, A. J. Blakely & Son; fourth, F. F. Warner & Son.

Ewe, Two Years Old or Over—First, A. J. Blakely & Son, 2409; second, F. F. Warner & Son; third, F. F. Warner & Son; fourth, A. J. Blakely & Son, on 2579.

Ewe, One Year Old and Under Two—First, F. F. Warner & Son; second, F. F. Warner & Son; third, Joe W. Edgar, on Edgar's 113; fourth, A. J. Blakely & Son, on 2689.

Ewe, Under One Year—First, Richards & Richards, on N. R. Vanderwort, 949; second, A. J. Blakely & Son; third, F. F. Warner & Son; fourth, Joe W. Edgar, on Edgar's, 120.

Champion Ram, Any Age—Richards & Richards.

Champion Ewe, Any Age—Richards & Richards.

Flock—First, Richards & Richards; second, F. F. Warner & Son; third, A. J. Blakely & Son.

Get of Sire—First, A. J. Blakely & Son; second, F. F. Warner & Son.

IOWA SPECIALS MERINO CLASS C.

Ram Two Years Old and Over—First, Joe W. Edgar, on Edgar's, 104; second, A. J. Blakely & Son; third, F. F. Warner & Son.

Ram, One Year Old and Under Two—First, F. F. Warner & Son; second, F. F. Warner & Son; third, A. J. Blakely & Son.

Ram, Under One Year—First, F. F. Warner & Son; second, A. J. Blakely & Son; third, F. F. Warner & Son.

Ewe, Two Years Old or Over—First and second, F. F. Warner & Son; third, A. J. Blakely & Son.

Ewe, One Year Old and Under Two—First, F. F. Warner & Son; second Joe W. Edgar, on Edgar's, 112; third, A. J. Blakely & Son, on 2689.

Ewe, Under One Year—First, A. J. Blakely & Son; second, F. F. Warner & Son; third, Joe W. Edgar, on Edgar's, 120.

Champion Ram, Any Age—Joe Edgar.

Champion Ewe, Any Age—A. J. Blakely & Son.

Flock—First, F. F. Warner & Son; second, A. J. Blakely & Son; third, Joe W. Edgar.

Get of Sire—First, F. F. Warner & Son.

RAMBOUILLET.

EXHIBITORS—C. S. Bratt & Son, Arapahoe, Nebraska; Chandler Bros., Kellerton; Iowa State College, Ames.

Ram, Two Years Old or Over—First, C. S. Bratt & Son, on C. P. Ranp, 213, 99239.

Ram, One Year Old and Under Two—First, Chandler Bros.; second, C. S. Bratt & Son, on C. S. Bratt No. 600, 96172; third, C. S. Bratt & Son, on C. S. Bratt No. 601, 96173.

Ram, Under One Year—First, C. S. Bratt & Son; second, Iowa State College, on I. S. C., 668; third, C. S. Bratt & Son.

Ewe, Two Years Old or Over—First, Chandler Bros.; second, Iowa State College, on U. of I.; third, Iowa State College, on U. of I.; fourth, C. S. Bratt & Son, on C. S. Bratt, 95918.

Ewe, One Year and Under Two—First, Iowa State College, on U. of I.; second, C. S. Bratt & Son, on C. S. Bratt, 96175; third, C. S. Bratt & Son, on C. S. Bratt, 96174; fourth, Chandler Bros.

Ewe, Under One Year—First and second, Iowa State College on I. S. C.: third and fourth, C. S. Bratt & Son.

Champion Ram, Any Age—C. S. Bratt & Son.

Champion Ewe, Any Age—Iowa State College.

Flock—First, Iowa State College; second, C. S. Bratt & Son; third, Chandler Bros.

Get of Sire—First, Iowa State College; second, C. S. Bratt & Son.

COTSWOLD.

Exhibitors—A. W. Arnold, Galesville, Wisconsin; Chandler Bros., Kellerton; Joe W. Edgar, New London; H. D. Eddingfield, Mt. Pleasant; Elmer Frye & Sons, Corydon; Geo. E. Husted, Russell; Maple Grove Farm, Ames; Richards & Richards, Lodi, Wisconsin.

Judge............................Wm. F. Renk, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, Richards & Richards, on Nesbith's 42nd, 88116; second, A. W. Arnold, on F. B. G. 25th, 90670; third, Richards & Richards, on Burton 530, 81802; fourth, Maple Grove Farm, on Garne's, 82999.

Ram, One Year Old and Under Two—First, Richards & Richards, on Burtons, 94991; second, A. W. Arnold, on Burton's, 94984; third, Joe W. Edgar, on Edgar's 259, 92415; fourth, Joe W. Edgar, on Edgar's 263, 92419.

Ram, Under One Year—First, Richards & Richards, on Burtons; second, Elmer Frye & Sons, on E. Frye & Son; third, Joe W. Edgar, on Edgar's; fourth, Elmer Frye & Sons, on E. Frye & Son.

Ewe, Two Years Old, or Over—First, A. W. Arnold, on A. 1917 Imp, 92633; second, A. W. Arnold, on Gaine 62 Imp, 74442; third, Joe W. Edgar, on Edgar's 224, 82935; fourth, H. D. Eddingfield, on A. 74, 92632.

Ewe, One Year Old and Under Two—First, A. W. Arnold, on Burton's 599, 94982; second, A. W. Arnold, on A. 1919 Imp, 92615; third, Richards & Richards, on Burton's 601 94994; fourth, Richards & Richards, on Burton's 602, 94993.

Ewe Under One Year—First, A. W. Arnold, on Mitchell's 31; second, Richards & Richards, on Burton's 613; third, Joe W. Edgar, on Edgar's 287, 97533; fourth, Richards & Richards, on Burton 616.

Champion Ram, Any Age—Richards & Richards.

Champion Ewe, Any Age—A. W. Arnold.

Flock—First, A. W. Arnold; second, Richards & Richards; third, Joe W. Edgar.

Get of Sire—First, Richards & Richards; second, Joe W. Edgar; third, Elmer Frye & Sons.

IOWA SPECIALS COTSWOLD.

Ram, Two Years Old or Over—First, Joe W. Edgar, on Edgar's 226, 82937; second, Maple Grove Farm, on Maple Grove's 249, 82089; third, Geo. E. Husted, on Husted 206, 97659.

Ram, One Year Old, and Under Two—First, Joe W. Edgar, on Edgar's 259, 92415; second, Joe W. Edgar, on Edgar's 263, 92419; third, Geo. E. Husted, on Husted 226, 97657.

Ram, Under One Year—First, Elmer Frye & Sons, on E. Frye & Sons; second, Joe W. Edgar, on Edgar's 284; third, Elmer Frye & Sons, on E. Frye & Sons.

Ewe, Two Years Old or Over—First, Joe W. Edgar, on Edgar's 224, 82935; second, Joe W. Edgar, on Edgar's 218, 81224; third, Geo. E. Husted, 81640.

Ewe, One Year Old and Under Two—First, Joe W. Edgar, on Edgar's 279, 94796; second, Joe W. Edgar, on Edgar's 280, 94797; third, Geo. E. Husted, on Husted 231, 92454.

Ewe, Under One Year—First, Joe W. Edgar, on Edgar's 287, 97533; second, Geo. E. Husted, on Husted 234; third, Elmer Frye & Sons, on E. Frye & Sons, 32.

Champion Ram, Any Age—Joe W. Edgar.

Champion Ewe, Any Age—Joe W. Edgar.

Flock—First, Joe W. Edgar; second, Geo. E. Husted; third, Elmer Frye & Sons.

Get of Sire—First, Joe Edgar; second, Elmer Frye & Sons; third, Geo. E. Husted.

LINCOLN & LEICESTER.

Exhibitors—A. W. Arnold, Galesville, Wisconsin; Chandler Bros., Kellerton.

Judge..........................William F. Renk, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, A. W. Arnold; second and third, Chandler Bros.

Ram, One Year Old and Under Two—First, A. W. Arnold; second, Chandler Bros.

Ram, Under One Year—First, A. W. Arnold; second, Chandler Bros.

Ewe, Two Years Old or Over—First, Chandler Bros.

Ewe, One Year Old and Under Two—First, A. W. Arnold; second and third, Chandler Bros.

Ewe, Under One Year—First, A. W. Arnold; second, Chandler Bros.

Champion Ram, Any Age—A. W. Arnold.

Champion Ewe, Any Age—A. W. Arnold.

Flock—First, Chandler Bros.

HAMPSHIRE DOWNS.

Exhibitors—A. W. Arnold, Galesville, Wisconsin; C. B. Baldwin, Brantford, Ontario; E. L. Bitterman, Nora Springs; Chandler Bros., Kellerton; John Graham & Sons, Eldora; Iowa State College, Ames; F. H. Osen, Anita.

Judge..........................William F. Renk, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, A. W. Arnold, on Williams Imp, 26335; second, F. H. Osen, on Ritchie Bros. 35, 18469; third, E. L. Bitterman, on Renks 255, 20332; fourth, John Graham & Sons, on Graham's 1162, 21702; fifth, A. W. Arnold, on Sherwood 222, 23339.

Ram, One Year Old and Under Two—First, E. L. Bitterman; second, A. W. Arnold, on Schmidt 728, 27316; third, C. B. Baldwin; fourth, John Graham & Sons.

Ram, Under One Year—First, Iowa State College, on I. S. C. 655; second, E. L. Bitterman, on Bitterman's 120; third, E. L. Bitterman, on Bitterman's 121; fourth, Iowa State College, on I. S. C. 659; fifth, A. W. Arnold, on Telfer 82.

Ewe, Two Years Old or Over—First, Iowa State College; second, E. L. Bitterman, on Bitterman's 105, 59286; third, Iowa State College; fourth, A. W. Arnold, on Mrs. Exp. 1535; fifth, A. W. Arnold, on Mrs. Exp. 1514, 42277.

Ewe, One Year Old and Under Two—First and second, Iowa State College; third, E. L. Bitterman, on Renks 328, 59644; fourth, E. L. Bitterman, on Bitterman's 108, 59289; fifth, A. W. Arnold, on Peterson's 22, 60804.

Ewe Under One Year—First and second, Iowa State College; third and fifth, E. L. Bitterman; fourth, A. W. Arnold, On Telfer 81.

Champion Ram, Any Age—A. W. Arnold, on Williams Imp, 26335.

Champion Ewe, Any Age—Iowa State College.

Flock—First, Iowa State College; second, E. L. Bitterman; third, A. W. Arnold; fourth, John Graham & Sons.

Get of Sire—First, Iowa State College; second, E. L. Bitterman; third, F. H. Osen; fourth, John Graham & Son.

SHROPSHIRE.

Exhibitors—C. B. Baldwin, Brantford, Ontario; E. L. Bitterman, Nora Springs; Chandler Bros., Kellerton; H. D. Eddingfield, Mt. Pleasant; R. I. Hawthorne & Sons, West Liberty; Iowa State College, Ames; Arl Jeffers, Murray; A. T. Jones & Sons, Everly; Daniel Leonard & Son, Corning; Maple Grove Farm, Ames; H. H. Reed, Marengo, J. A. Taylor, Ames.

Judge........................William F. Renk, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, A. T. Jones & Sons, on Broughton, 424398; second, H. D. Eddingfield, on Eddingfield Farms, 479863; third, E. L. Bitterman, on Broughton's 483054; fourth, Daniel Leonard & Son, on Cellock, 480333.

Ram, One Year Old and Under Two—First, A. T. Jones & Sons, on McKerrows, 482993; second, E. L. Bitterman, on Broughton, 499280; third, H. D. Eddingfield, on McKerrows; fourth, A. T. Jones & Sons, 482623.

Ram, Under One Year—First, H. D. Eddingfield, on Eddingfield Farms Disturber, 498078; second, E. L. Bitterman, 497999; third, A. T. Jones; fourth, E. L. Bitterman, on Broughton, 499282.

Ewe, Two Years Old or Over—First, H. D. Eddingfield, on Eddingfield's Farms, 475524; second, H. D. Eddingfield, on Butler; third, J. A. Taylor, on J. A. Taylor, 428815; fourth, E. L. Bitterman, on Broughton, 466694; fifth, E. L. Bitterman, on East Views, 488983.

Ewe, One Year Old and Under Two—First, A. T. Jones, on McKerrow, 467752; second, E. L. Bitterman, on Broughtons, 499285; third, J. A. Taylor, on J. A. Taylor, 499220; fourth, H. D. Eddingfield, on Billy.

Ewe, Under One Year—First, E. L. Bitterman, 498015; second, E. L. Bitterman, 498015; third, A. T. Jones & Sons, on McKerrows; fourth, H. D. Eddingfield, on Eddingfield Farms Mucky, 498067.

Champion Ram, Any Age—A. T. Jones & Sons.

Champion Ewe, Any Age—A. T. Jones & Sons.

Flock—First, E. L. Bitterman; second, A. T. Jones & Sons; third, H. D. Eddingfiield; fourth, Chandler Bros.

Get of Sire—First, E. L. Bitterman; second, A. T. Jones & Sons; third, H. D. Eddingfield; fourth, Chandler Bros.

IOWA SHROPSHIRE SPECIALS.

Ram, Two Years Old or Over—First, H. D. Eddingfield, on Eddingfield Farms, 479863; second, H. D. Eddingfield, on Eddingfield Felie, 441122; third, E. L. Bitterman; fourth, A. T. Jones & Sons, on Jones, 485507; fifth, J. A. Taylor, on J. A. Taylor, 483459.

Ram, One Year Old and Under Two—First, A. T. Jones & Sons, on Jones; second, Daniel Leonard & Son, on Leonards, 494287; third, E. L. Bitterman, 484000; fourth, Chandler Bros., on C. W. Chandler; fifth, H. D. Eddingfield, on Eddingfield Farms Charmer, 498086.

Ram, Under One Year—First, E. L. Bitterman, on 497999; second, A. T.

Jones & Sons; third, E. L. Bitterman, on 497996; fourth, Maple Grove Farm; fifth, H. D. Eddingfield, on Eddingfield Farms Foremost Disturber, 498084.

Ewe, Two Years Old or Over—First, J. A. Taylor, on J. A. Taylor, 428815; second and third, E. L. Bitterman; fourth, A. T. Jones & Sons; fifth, Chandler Bros., on Chanler.

Ewe, One Year Old and Under Two—First, J. A. Taylor, on J. A. Taylor, 499220; second, H. D. Eddingfield, on Eddingfield Farms, 498064; third, A. T. Jones & Sons, on 467134; fourth, Chandler Bros., on 2141; fifth, J. A. Taylor, on J. A. Taylor, 466166.

Ewe, Under One Year—First, E. L. Bitterman, on 498014; second, H. D. Eddingfield, on Eddingfield Farms Mickey, 498067; third, Chandler Bros.; fourth, E. L. Bitterman, 498013; fifth, H. D. Eddingfield, 498072.

Champion Ram, Any Age—H. D. Eddingfield, 479863.

Champion Ewe, Any Age—J. A. Taylor.

Flock—First, H. D. Eddingfield; second, E. L. Bitterman; third, Chandler Bros.

Get of Sire—First, H. D. Eddingfield; second, Chandler Bros.

OXFORD DOWNS.

EXHIBITORS—A. W. Arnold, Galesville, Wisconsin; C. B. Baldwin, Brantford, Ontario; Chandler Bros., Kellerton; C. C. Croxen, West Liberty; John Graham & Sons, Eldora; George Hanser, Union; Iowa State College, Ames; F. H. Osen, Anita; Richards & Richards, Lodi, Wisconsin.

JUDGE........................WILLIAM F. RENK, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, John Graham & Sons, on Graham's 1138, 80037; second, Iowa State College, on Bruce 11 of 16, 74952; third, C. B. Baldwin, 82748; fourth, Geo. Hanser, on Graham's 1366, 91941; fifth, A. W. Arnold, 87044.

Ram, One Year Old and Under Two—First, Richards & Richards, on Nestor Hoyt 6th, 9551; second, Iowa State College, on I. S. C. 592, 85596; third, Geo. Hanser, on 87297; fourth, Geo. Hanser, on P. A. & Sons 66, 92233; fifth, John Graham & Sons, on Grahams.

Ram, Under One Year—First, Iowa State College, on I. S. C. 671; second, Iowa State College, on I. S. C. 692; third, Geo. Hanser, on Hanser's 9, 92270; fourth, Richards & Richards; fifth, John Graham & Sons, on Graham's 1404, 92026.

Ewe, Two Years Old or Over—First, A. W. Arnold, on Stones 1368, 80247; second, Iowa State College, on I. S. C. 488, 80139; third, John Graham & Sons, on Graham's 1028, 71475; fourth, John Graham & Sons, on Graham's 1337, 85576; fifth, Geo. Hanser, on P. A. & Sons 23, 79879.

Ewe, One Year Old and Under Two—First, A. W. Arnold, on N. D. A. C. 737, 85307; second, Iowa State College, on I. S. C. 620, 86898; third, Iowa State College, on I. S. C. 594, 85598; fourth, Richards & Richards, on McKerrows 3894; fifth, Geo. Hanser, on P. A. & Sons 25, 91121.

Ewe, Under One Year—First, Iowa State College, on I. S. C. 674; second, John Graham & Sons, on Graham's 1403, 92028; third, John Graham & Sons, on Graham's 1401, 92029; fourth, A. W. Arnold, On N. D. A. C. 853; fifth, Geo. Hanser, on P. A. & Sons 28, 91608.

Champion Ram, Any Age—Richards & Richards, on Nestor's Hoyt 6th, 9551.

Champion Ewe, Any Age—A. W. Arnold, on Stones 1368, 80247.

Flock—First, Iowa State College; second, A. W. Arnold; third, John Graham & Sons; fourth, Richards & Richards.

Get of Sire—First, Iowa State College; second, John Graham & Sons; third, Geo. Hanser; fourth, C. C. Croxen.

IOWA OXFORD SPECIALS.

JUDGE........................WILLIAM F. RENK, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, Geo. Hanser, on Graham's 1366, 91941; second, Geo. Hanser, on Graham's 1365, 91939; third, F. H. Osen, on Osen's 136, 86379; fourth, John Graham & Sons, on 92924.

Ram, One Year Old and Under Two—First and second, John Graham & Sons; third, Geo. Hanser, on Grahams, 91943; fourth, C. C. Croxen, on 86541.

Ram, Under One Year—First, Geo. Hanser, on Hanser's 9; second, John Graham & Sons, on Graham's 1405, 92026; third, John Graham & Sons, on Graham's 1411, 92025; fourth, F. H. Osen, on Osen's 229.

Ewe, Two Years Old or Over—First, John Graham & Sons, on Graham's 1028, 71475; second, John Graham & Sons, on Graham's 1337, 85576; third and fourth, C. C. Croxen.

Ewe, One Year Old and Under Two—First, John Graham & Sons, on Graham's 1281; second, John Graham & Sons, on Graham's 1275, 85575; third, F. H. Osen, on Osen's 171; fourth, C. C. Croxen.

Ewe, Under One Year—First, John Graham & Sons, on Graham's 1403, 92027; second, John Graham & Sons, on Graham's 1401, 92029; third and fourth, C. C. Croxen.

Champion Ram, Any Age—First, Geo. Hanser.

Champion Ewe, Any Age—John Graham & Sons.

Flock—First, John Graham & Sons; second, F. H. Osen; third, C. C. Croxen.

Get of Sire—First, John Graham & Sons; second, C. C. Croxen; third, F. H. Osen.

SOUTHDOWN.

EXHIBITORS—A. W. Arnold, Galesville, Wisconsin; C. B. Baldwin, Brantford, Ontario; E. L. Bitterman, Nora Springs; Chandler Bros., Kellerton; H. D. Eddingfield, Mt. Pleasant; Iowa State College, Ames; H. H. Reed, Marengo; Turner Bros., Dewitt.

JUDGE........................WILLIAM F. RENK, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, Chandler Bros.; second, E. L. Bitterman, on Knox 18, 36163; third, Chandler Bros.; fourth, A. W. Arnold, on W. H. 1682, 33312; fifth, Turner Bros., on I. S. C. 513, 35400.

Ram, One Year Old and Under Two—First, Iowa State College, on I. S. C. 603, 36937; second, H. H. Reed, on Miners 7088, 37599; third, E. L. Bitterman, on Fantz's 122, 38388; fourth, Chandler Bros; fifth, A. W. Arnold, on W. H. 7008, 36794.

Ram, Under One Year—First, Iowa State College, on I. S. C. 734; second, Iowa State College, on I. S. C. 728; third, H. H. Reed, on Miner's 7112; fourth, H. H. Reed, on Miner's 7117; fifth, E. L. Btiterman, on Bitterman's 40, 38290.

Ewe, Two Years Old or Over—First, Iowa State College, on I. S. C. 509, 35403; second, A. W. Arnold, on A. D. C. A. 698, 35439; third, E. L. Bitterman, on Knox 17, 36162; fourth, H. H. Reed, on Miner's 3160, 36055; fifth, Chandler Bros.

Ewe, One Year Old and Under Two—First, Iowa State College, on I. S. C. 604, 36927; second, A. W. Arnold, on A. D. C. A. 805, 38203; third, Iowa State College, on I. S. C. 587, 36924; fourth, C. B. Baldwin; 5th, H. H. Reed, on Miner's 7070.

Ewe, Under One Year—First, H. H. Reed, on Miner's 7125; second, Iowa State College on I. S. C. 714; third, Iowa State College; fourth, H. H. Reed, on Miner's 7102; fifth, E. L. Bitterman, on Bitterman's 45, 38294.

Champion Ram, Any Age—Chandler Bros.

Champion Ewe, Any Age—Iowa State College, on I. S. C. 509, 35403.

Flock—First, Iowa State College; second, H. H. Reed; third, Chandler Bros.; fourth, Turner Bros.; fifth, A. W. Arnold.

Get of Sire—First, Iowa State College; second, H. H. Reed; third, E. L. Bitterman.

DORSET.

Exhibitors—A. W. Arnold, Galesville, Wisconsin; Edmund Hansen, Dean; H. H. Reed, Marengo.

Judge........................William F. Renk, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, A. W. Arnold, on Thimer's 2416. 20792; second, Edmund Hansen.

Ram, One Year Old and Under Two—First, A. W. Arnold, on Fred, 20476; second, H. H. Reed, on Tranquility; third, Edmund Hansen.

Ram, Under One Year—First, Edmund Hansen; second, A. W. Arnold, on Thimers, 23608; third, H. H. Reed, on Reed's 195.

Ewe, Two Years Old or Over—First, A. W. Arnold, on Thimers' 2508, 20600; second, H. H. Reed, on Miner's 2603, 21323; third, Edmund Hansen.

Ewe, One Year Old and Under Two—First, A. W. Arnold, on Thimers' 2359, 22502; second, H. H. Reed, on Tranquility 3794, 22755; third, Edmund Hansen.

Ewe, Under One Year—First, A. W. Arnold, on Thimers' 3500, 23607; second, H. H. Reed, on Miners' 3488, 23600; third, Edmund Hansen.

Champion Ram, Any Age—Edmund Hansen.

Champion Ewe, Any Age—A. W. Arnold.

Flock—First, A. W. Arnold; second, H. H. Reed; third, Edmund Hansen.

Get of Sire—H. H. Reed.

CHEVIOT.

Exhibitors—A. W. Arnold, Galesville, Wisconsin; Maple Grove Farm, Ames; Elmer Reed, Ames; H. H. Reed, Marengo; Richards & Richards, Lodi, Wisconsin.

Judge........................William F. Renk, Sun Prairie, Wis.

Ram, Two Years Old or Over—First, H. H. Reed; second, A. W. Arnold, on Clark, 10596; third, Maple Grove Farm, on Maple Groves, 9948.

Ram, One Year Old and Under Two—First, H. H. Reed, on Maplehurst, 10720; second, Maple Grove Farm, on Maple Grove, 10769; third, A. W. Arnold, on Clark, 11378.

Ram, Under One Year—First, Maple Grove Farm, on Maple Groves; second, H. H. Reed, on Reed's 197; third, H. H. Reed, on Reed's 200.

Ewe, Two Years Old or Over—First, A. W. Arnold, on Clark, 9053; second, Maple Grove Farm, on Maple Grove, 9944; third; H. H. Reed, on Lilly, 10202.

Ewe, One Year Old and Under Two—First, H. H. Reed, on Clarks, 10721; second, Maple Grove Farm, on Maple Grove, 10771; third, A. W. Arnold, on Clark, 10788.

Ewe, Under One Year—First, H. H. Reed, on Reeds; second, Maple Grove Farm, on Maple Grove 350; third, H. H. Reed, on Reed's 198.

Champion Ram, Any Age—First, H. H. Reed.

Championo Ewe, Any Age—H. H. Reed.

Flock—First, H. H. Reed; second, A. W. Arnold; third, Maple Grove Farm.

Get of Sire—First, H. H. Reed; second, Maple Grove Farm.

WOOL EXHIBITS.

EXHIBITORS—E. K. Bitterman, Nora Springs; H. A. Crouch, Knoxville; C. C. Croxen, West Liberty; Joe W. Edgar, New London; Daniel Leonard & Sons, Corning; Maple Grove Farm, Ames; H. H. Reed, Ames; T. D. Rittgers, Dallas Center; F. F. Warner & Son, Bloomfield; Otto R. Warner, Bloomfield; Will Weible, Brighton.

JUDGE.............................C. J. FAWCETT, Malcom, Iowa.

Long Wool Fleece—First and second, Geo. E. Husted; third and fourth, Joe W. Edgar.

Medium Wool—First, Daniel Leonard & Sons; second and third, E. L. Bitterman; fourth, Will Weible; fifth, H. H. Reed.

Fine Wool—First and second, Otto R. Warner; third and fourth, F. F. Warner & Son; fifth, Joe W. Edgar.

Sweepstakes—F. F. Warner

SHEARING EVENTS.

CONTESTANTS—A. E. Adams, Des Moines; A. B. Anderson, Carlisle; Claude Anderson, Carlisle; C. H. Brown, Keokuk; Albert Bryant, Mt. Pleasant; C. C. Croxen, West Liberty; J. P. Graham, Eldora; Wade Hansen, Union; George Husted, Russell; S. H. Mathews, Woodburn; J. A. Peasley, Indianola; E. C. Pyles, Marshalltown; John Rail, Milton; H. H. Reed, Marengo; Edward Uhl, Ames; C. P. White, West Grove; Walter Wickerson, Everly.

JUDGES ....{ C. C. CROXEN, West Liberty
J. A. TAYLOR, Ames
E. L. BITTERMAN, Nora Springs

Shearing With Power Machine by Professionals—First, C. H. Brown; second, Albert Bryant; third, Edward Uhl, fourth, J. A. Peasley.

Shearing With Hand Shears by Professionals—First, John Rail; second, A. B. Anderson.

Shearing With Power Machine by Amateurs—First, C. P. White; second, S. H. Mathews; third, J. P. Graham; fourth, H. H. Reed.

Shearing With Hand Shears by Amateurs—First, Walter Wickerson; second, J. P. Graham; third, S. H. Mathews.

Shearing With Power Machine by Boy Not Over Fifteen Years Old—First, Claude Anderson.

Blocking and Trimming Sheep for Show Ring—First, Edward Uhl; second, Albert Bryant; third, Wade Hansen; fourth, Walter Wickerson; fifth, E. C. Pyles.

MILCH GOATS.

EXHIBITORS—N. Bartholomew, Des Moines; O. R. Sheets, Des Moines.

JUDGE ....D. H. MILLER, Council Bluffs.

Buck, Under Six Months—First, N. Bartholomew, on Hummer.

Doe, Two Years Old or Over—First, N. Bartholomew, on Dolly Marie, Vol. 669.

Doe, Under One Year—First, N. Bartholomew, on Fenette.

REGISTERED TOGGENBURG.

Doe, Two Years Old, or Over—First, O. R. Sheets, on Fleeta H., 1039; second, N. Bartholomew, on Daisy Dell.

Doe, Under One Year—First, N. Bartholomew, on Lucy B.

NUBIAN (PURE BRED).

Buck, Under Six Months—First, N. Bartholomew, on Glen B.

Doe, Two Years Old or Over—First, N. Bartholomew, on Nura Nubia, P-1124.

Doe, Under One Year—First, N. Bartholomew, on Dell B.

REGISTERED NUBIAN.

Doe, Two Years Old or Over—First, N. Bartholomew, on Idol Girl, G 650; second, O. R. Sheets, on Malise, G 358; third, N. Bartholomew, on Lena G, G 793.

Doe, One Year Old and Under Two—First, N. Bartholomew, on Princess B.; second, N. Bartholomew, on Trixie; third, O. R. Sheets, on Gloria.

Doe, Under One Year—First, N. Bartholomew, on Blue Bell; second, N. Bartholomew on Adaline; third, O. R. Sheets, on Sarah.

PREMIER EXHIBITOR.

Exhibitor Winning the Greatest Number of Points—First, N. Bartholomew, second, O. R. Sheets.

ANGORA GOATS.

EXHIBITORS—Wm. Underdown, Mt. Etna.

Buck, Two Years Old or Over—First, Wm. Underdown, on 83172; second, Wm. Underdown, on Riddels' 76866.

Buck, One Year Old and Under Two—First, Wm. Underdown, on 83638; second, Wm. Underdown, on 83637.

Buck, Under One Year Old—First, Wm. Underdown, 83639; second, Wm. Underdown, on 83640.

Doe, Two Years Old or Over—First, Wm. Underdown, on 82923; second, Wm. Underdown, on 82934.

Doe One Year Old and Under Two—First, Wm. Underdown, on 84308; second, Wm. Underdown, on 84451.

Doe, Under One Year—First, Wm. Underdown, 84453; second, Wm. Underdown, on 84452.

One Buck and Three Does, Any Age—First, Wm. Underdown.

Champion Buck, Any Age—First, Wm. Underdown.

Champion Doe, Any Age—First, Wm. Underdown.

POULTRY AND PET STOCK DEPARTMENT.

SUPERINTENDENT....................V. G. WARNER, Bloomfield, Iowa

JUDGES......................
F. H. SHELLABARGER, West Liberty
JOSEPH DAGLE, Richland
HARRY ATKINS, Davenport
FRANK HARRIS, Des Moines (Rabbits)

AMERICAN.

EXHIBITORS—Adolph Ruchti, Newton; Peter Hove, Stanhope; F. A. Van Antwerp, Jefferson; J. H. Todd, Villisca; Mrs. J. E. Hester, Earlham; A. L. Anderson, Indianola; F. E. Fifield, Woodbine; M. L. Jones. Gladbrook; F. T. Howlett, Des Moines; J F. Harsh, New Virginia; J. H. Stoddard, Chelsea; Erle Smiley, Beaver Crossing, Neb.; William Boyce, Des Moines; Jas. H. Johnson, Muscatine; Capital City Poultry Yards, Des Moines; O. J. Hammar, Dayton; R. V. Keeney, Altoona; L. C. Wilson, Eagle Grove; M. H. Buck, Prairie City;

W. W. Henderson, Bridgeton, Mo.; Chas. A. McMaster, Des Moines; William Hoos, Des Moines; William McMichael, Des Moines; F. L. Rinehard & Son, Ottumwa; Carl Wiggins, Prairie City; Mrs. A. G. F. Stice, Mt. Pleasant; John Peterson, Randall; L. W. Stearnes, Selma; Roy McCloud, Woodward; H. M. Corning, Waterloo; C. F. Stoughton, Cambridge, Ill.; M. G. Weaver, Lewis; Schaaf 1733 Ranch, Kearney, Neb.; Mrs. J. J. Kane, Murray; Edmund Hanson, Dean; F. W. Johnson, Monroe; S. J. Brady, Milton; Ed. J. Erickson, Howard, Neb.; C. E. Clay, Ames; Joe F. Denburger, Des Moines; Walter Russell, Indianola; D. H. Porter, Kellogg; Kellogg & Kellogg, Cambridge, Ill.; T. H. Hall, Des Moines; M. C. Rogers, North Platte, Neb.; Albert Ruess, West Liberty; F. F. Warner & Son, Bloomfield; Julius Sinn, Williamsburg; C. Boat, Pella; Ray A. Gardner, Osage; M. J. Seeley, Waterloo; Albert Mather, Des Moines; Chas H. Duer, Eagle Grove; Mrs. Wm. Cottrill, Des Moines; J. T. Clark, Des Moines; C. D. Knight, Ames; H. M. Beaver, Davenport; Robert Lamphere, Utica, Neb.; M. J. Coffin & Sons, Waverly; Waldo Pence, Marshalltown; J. S. Wasson, Davenport; Silvis S. Stamm, Orillia; Dana Wagner, Des Moines; S. G. Dunn, Winterset; Byrum Bros., Ottumwa; J. B. Thomas, Hampton; Jas. Hawk, Jr., Sheffield; Orman & Reinhard, Ottumwa; Walt Mahaffa, Waukee; G. F. Wisecup, Woodward; William H. Hodge, Des Moines; Murray McMurray, Webster City; Henry Buhlmann, Manning; J. T. Fletcher, What Cheer; C. O. Merrill, New Virginia; L. D. Carpenter, Indianola; T. C. Bassett, Des Moines; Roy D. Brown, Sheffield, Des Moines; Harold Schabilion, Columbus City; Griffith Bros., Boone.

SWEEPSTAKES.

Barred Plymouth Rock Cockerel—(33), W. W. Henderson, Bridgeton, Missouri.

Rhode Island Red Pullet—(33), Orman & Reinhard, Ottumwa, Iowa.

PLYMOUTH ROCK.

Flocks, Two Entries—First, (48, 39, 33, 32, 31, 29, 25, 30, 19, 16, 9), Adolph Ruchti, Newton, Iowa; second, (92, 25, 74, 54, 60, 55, 56, 71, 73, 52, 51), Peter Hove, Stanhope, Ia.

WYANDOTTE.

Flock, Five Entries—First, (106, 113, 119, 102, 191, 153, 109, 111, 236, 230, 172), A. L. Anderson; second, (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11), J. H. Todd, Villisca, Iowa; third, (26, 27, 30, 31, 32, 35, 36, 37, 38, 48, 50), F. A. Van Antwerp, Jefferson, Iowa.

RHODE ISLAND RED.

Flock, Two Entries—First, (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 22), M. L. Jones, Gladbrook, Iowa; second, (84, 84, 83, 81, 80, 79, 78, 77, 76, 75, 74), F. T. Howlett, Des Moines, Iowa.

BARRED PLYMOUTH ROCK.

COCKEREL BRED.

Cock, Seventeen Entries—First, (45), second, (58), W. W. Henderson; third, (94), J. F. Harsh, New Virginia, Iowa.

Cockerel, Eighteen Entries—First, (33), third, (73), W. W. Henderson; second, (6), Wm. Michael, Des Moines, Iowa.

Hen, Twenty-two Entries—First, (22), J. H. Stoddard, Chelsea, Iowa; second, (20), W. W. Henderson; third, (16), Mrs. A. G. F. Stice, Mt. Pleasant, Iowa.

Pullet, Fifteen Entries—First, (8), second, (5), W. W. Henderson; third, (2), Carl Wiggins, Prairie City, Iowa.

Pen Fowls, Six Entries—First, W. W. Henderson; second, (20, 15, 12, 24, 25), Mrs. A. G. F. Stice; third, (16, 17, 20, 21, 25), Carl Wiggins.

Pen Chicks, Six Entries—First, W. W. Henderson; second, (3, 4, 5, 6, 10), Carl Wiggins; third, (78, 74, 76, 73, 71), J. F. Harsh.

BARRED PLYMOUTH ROCK.

PULLET BRED.

Cock, Seven Entries—First, (47), Adolph Ruchti; second, (26), and third, (52), W. W. Henderson.

Cockerel, Fifteen Entries—First, (94), W. W. Henderson; second, (6), and third, (7), John Peterson, Randall, Iowa.

Hen, Twelve Entries—First, (48), and third, (43), W. W. Henderson; second, (28), Capital City Poultry Yards, Des Moines, Iowa.

Pullet, Twelve Entries—First, (3), and second, (28), W. W. Henderson; third, (288), John Peterson.

Pen Fowls, Six Entries—First, W. W. Henderson; second, (17, 9, 35, 24, 31), Adolph Ruchti; third, (1, 214, 238, 213, 111), L. W. Stearnes, Selma, Iowa.

Pen Chicks, Four Entries—First, W. W. Henderson; second, (40, 14, 15, 8, 18), Adolph Ruchti; third, (10, 290, 291, 292, 293), John Peterson.

WHITE PLYMOUTH ROCK.

TEN ENTRIES.

Cock—First, (90), C. F. Stoughton, Cambridge, Illinois; second, (3, 6, 4, 5, 9), H. M. Corning, Waterloo, Iowa; third, (90), Schaaf 1733 Ranch, Kearney, Neb.

Cockerel, Ten Entries—First, (94), C. F. Stoughton; second, (9), Ed J. Erickson, Howard, Neb.; third, (78), H. M. Corning.

Hen, Fourteen Entries—First, (3035), Schaaf, 1733 Ranch; second, (1696), S. J. Brady, Milton, Iowa; third, (95), C. E. Stoughton.

Pullet, Seventeen Entries—First, (98), C. F. Stoughton; second, (82). H. M. Corning; third, (43), C. E. Clay, Ames, Iowa.

Pen Fowls, One Entry—First, (14, 2, 30, 27, 3033-a, 1444), Schaaf 1733 Ranch.

Pen Chicks, Two Entries—First, (1, 2, 3, 4, 5), S. J. Brady.

BUFF PLYMOUTH ROCK.

Cock, Eight Entries—First, (44), Kellogg & Kellogg, Cambridge, Ill.; second, (40), Peter Hove; third, (47), M. G. Weaver, Lewis, Iowa.

Cockerel, Thirteen Entries—First and second, (62) and (65), Peter Hove; third, (31), M. G. Weaver.

Hen, Thirteen Entries—First and second, (32) and (30), Kellogg & Kellogg; third, (32), M. G. Weaver.

Pullet, Sixteen Entries—First, (43), R. V. Keeney, Altoona, Iowa; second, (195), P. H. Hall, Des Moines, Iowa; third, (45), M. G. Weaver.

Pen Fowls, Three Entries—First, (75, 58, 61, 64, 67), Peter Hove; second, (5, 6, 7, 8, 9), Walter Russell, Indianola, Iowa; third, (4, 35, 10, 25, 10, 99). M. G. Weaver.

Pen Chicks, Three Entries—First, (72, 69, 59, 70, 68), Peter Hove; second, (1, 45, 56, 46, 65), M. G. Weaver; third, (10, 11, 12, 13, 14), Walter Russell.

PARTRIDGE PLYMOUTH ROCK.

Cock, Four Entries—First, (131), M. C. Rogers, North Platte, Neb.; second and third, (15) and (40), Kellogg & Kellogg.

Cockerel, Two Entries—First and second, (11), and (5) Kellogg & Kellogg.

Hen, Four Entries—First, (48), M. C. Rogers; second, (19), Kellogg & Kellogg; third, (45), R. V. Keeney.

Pullet, Two Entries—First and second, (7) and (12), Kellogg & Kellogg.

SILVER WYANDOTTE.

Cock, Five Entries—First, (19), F. F. Warner & Son, Bloomfield, Iowa; second, (39), J. H. Todd; third, (38), Albert Ruess, West Liberty, Iowa.

Cockerel, Eight Entries—First and second, (29) and (30), F. F. Warner & Son; third, (41), J. H. Todd.

Hen, Ten Entries—First, (31), F. F. Warner & Son; second and third, (39) and, (14), Albert Ruess.

Pullet, Eight Entries—First, (20), Albert Ruess; second, and third, (37) and (38), J. H. Todd.

Pen Fowls, Three Entries—First, (35, 36, 37, 38, 39), F. F. Warner & Son; second, (209, 33, 34, 35, 32), J. H. Todd.

Pen Chicks, Three Entries—First, (27, 28, 29, 30, 31), J. H. Todd; second, (40, 4, 42, 43, 44), F. F. Warner & Son; third, (25, 27, 28, 29, 30), Albert Ruess.

GOLDEN WYANDOTTE.

Cock, Seven Entries—First, (145), A. L. Anderson; second, (1), Julius Simm, Williamsburg, Iowa; third, (149), A. L. Anderson.

Cockerel, Ten Entries—First, second and third, (139), (127) and (135), A. L. Anderson.

Hen, Eight Entries—First, (3), Julius Simm; second and third, (130), (143), A. L. Anderson.

Pullet, Eight Entries—First and third, (138), (141), A. L. Anderson; second, (182), Earl Smiley, Beaver Crossing, Neb.

Pen Fowls, Three Entries—First, (9, 5, 6, 7, 8), Julius Simm; second and third, (126, 133, 147, 146, 128) and, (148, 144, 156, 142, 136), A. L. Anderson.

Pen Chicks, Two Entries—First, (165, 151, 234, 239, 235), second, (162, 161, 154, 160, 170), A. L. Anderson.

WHITE WYANDOTTE.

Cock, Nine Entries—First and second, (52) and (538), Ray Gardner, Osage, Iowa; third, (47), M. J. Seeley, Waterloo, Iowa.

Cockerel, Ten Entries—First, (1), Albert Mather, Des Moines, Iowa; second, (22), Ray Gardner; third, (127), Chas. H. Duer, Eagle Grove, Iowa.

Hen, Twelve Entries—First, (8), Ray Gardner; second, (8), C. Boat, Pella, Iowa; third, (2034), Schaaf 1733 Ranch.

Pullet, Twelve Entries—First and third, (25) and (26), H. M. Beaver, Davenport, Iowa; second,, (5), Albert Mather.

Pen Fowls, One Entry—First, (104, 66, 85, 68, 77), C. Boat.

Pen Chicks, Four Entries—First, (117, 100, 135, 122, 118), Chas. H. Duer; second, (4461, 4470, 4496, 4499, 4492), Schaaf 1733 Ranch; third, (247, 10, 20, 12, 22), Albert Mather.

BUFF WYANDOTTE.

Cockerel, One Entry—First, (58), F. F. Warner & Son.

Hen, Three Entries—First, (56), F. F. Warner & Son; second, (1), R. V. Keeney.

BLACK WYANDOTTE.

Cock, Three Entries—First, (195), Robert Lamphere, Utica, Neb.

Cockerel, Three Entries—First, second and third, (158), (165), (22), Robert Lamphere.

Hen, Six Entries—First, (158), Robert Lamphere; second and third, (37) and (35), H. M. Buck, Prairie City, Iowa.

Pullet, Three Entries—First, second and third, (54), (188), (177), Robert Lamphere.

PARTRIDGE WYANDOTTE.

Cock, Five Entries—First, (87), F. E. Fifield, Woodbine, Iowa; second, (2), Edward Hansen, Dean, Iowa; third, (3), R. V. Keeney.

Cockerel, One Entry—First, (74), F. E. Fifield.

Hen, Seven Entries—First, (2), W. J. Coffin & Son, Waverly, Iowa; second and third, (820) and (500), F. E. Fifield.

Pullet, Two Entries—First, (240), F. E. Fifield; second, No band, Waldo Pence, Marshalltown, Iowa.

Pen Fowls, One Entry—First, (18, 105, 496, 248, 245), F. E. Fifield.

Pen Chicks, One Entry—First, (218, 236, 237, 238, 239), F. E. Fifield.

SILVER PENCILED WYANDOTTE.

Cock, Three Entries—First, (46), F. F. Warner & Son; second, (8), Jas. S. Wason, Davenport, Iowa; third, (41), R. V. Keeney.

Cockerel, Four Entries—First, second and third, (50), (47), (48), F. F. Warner & Son.

Hen, Six Entries—First, (27), Jas. S. Wason; second and third, (53) and (52), F. F. Warner & Son.

Pullet, Two Entries—First and second, (55) and (62), F. F. Warner & Son.

COLUMBIAN WYANDOTTE.

Cock, One Entry—First, (17), Mrs. J. E. Hester, Earlham, Iowa.

Cockerel, Three Entries—First and third, (51) and (7), Earl Smiley; second, (18), Mrs. J. E. Hester.

Hen, Two Entries—First, (36), F. L. Reinhard & Son, Ottumwa, Iowa; second, (19), Mrs. J. E. Hester.

Pullet, Three Entries—First and second, (10) and (40), Earl Smiley; third, (20), Mrs. J. E. Hester.

Pen Fowls, One Entry—First, (12, 13, 14, 15, 16), Mrs. J. E. Hester.

MOTTLED JAVA.

Cock, One Entry—First, (12), Earl Smiley.

Hen, Two Entries—First and second, (46) and (176), Earl Smiley.

SINGLE COMB RHODE ISLAND RED.

Cock, Fifteen Entries—First, (917), Orman & Reinhard; second, (148), Schaaf 1733 Ranch; third, (170), Jas. Hawk, Jr., Sheffield, Iowa.

Cockerel, Nine Entries—First and second, (938) and (922), Orman & Reinhard; third, (79), G. F. Wisecup, Woodward, Iowa.

Hen, Twelve Entries—First, (34), Jas. Hawk, Jr.; second, (97), F. P. Howlett, Des Moines, Iowa; third, (83), J. D. Thomas, Hampton, Iowa.

Pullet, Nineteen Entries—First, (776), Orman & Reinhard; second, (85), G. F. Wisecup; third, (46), J. B. Thomas.

Pen Fowls, Nine Entries—First, (4849, 4482, 4481, 4474, 4486), Schaaf 1733 Ranch; second, (8936, 35907, 35911, 35338, 35911), Henry Bullmann, Manning, Iowa; third, (733, 928, 748, 796, 800), Orman & Reinhard.

Pen Chicks, Eight Entries—First, (743, 739, 699, 944, 745), Orman & Reinhard; second, (92, 98, 93, 77, 83), G. F. Wisecup; third, (90, 86, 96, 91, 97), Dana Wagner, Des Moines, Iowa.

ROSE COMB RHODE ISLAND RED.

Cock, Eleven Entries—First, (94), T. L. Jones, Boone, Iowa; second, (8), Harold Schablion, Columbus City, Iowa; third, (130), C. O. Merrill, New Virginia, Iowa.

Cockerel, Thirteen Entries—First, second and third, (27), (3), (7), Harold Schablion.

Hen, Ten Entries—First, (163), L. D. Carpenter, Indianola, Iowa; second, R. V. Keeney; third, (15), M. L. Jones, Gladbrook, Iowa.

Pullet, Nineteen Entries—First, (6), Roy D. Brown, Sheffield, Iowa; second, (6930), J. T. Scheffer, What Cheer, Iowa; third, (4), Roy D. Brown.

Pen Fowls, One Entry—First, (48, 17, 19, 20, 21), M. L. Jones.

Pen Chicks, One Entry—First, (5, 2, 28, 19, 29), Harold Schablion.

BUCKEYE.

Cock, One Entry—First, (7), Edward Hansen.

Hen, Two Entries—First, (8), Edward Hansen.

ASIATIC.

Exhibitors—Wier Hart, Bondurant; M. C. Rogers, North Platte, Neb.; J. W. Johnson, Monroe; Edward Hansen, Dean; R. V. Keeney, Altoona; Erle Smiley, Beaver Crossing, Neb.; W. Patterson, Carlisle; Chester L. Mason, Early; C. E. Wicklund, Marshalltown; Floyd R. Ellis, Beaver Crossing, Neb.

Sweepstakes.

Black Langshan Cockerel, (81), C. E. Wickland, Marshalltown, Iowa.

Light Brahma Pullet, (4), Weir Hart, Bondurant, Iowa.

Flock, One Entry—First, (51, 50, 46, 2, 48, 49, 5, 6, 47, 39, 14), Weir Hart.

LIGHT BRAHMA.

Cock, One Entry—First, (49), Weir Hart.

Cockerel, Two Entries—First and second, (43) and (90), Weir Hart.

Hen, Six Entries—First and second, (38) and (48), Weir Hart; third, (11), Edward Hansen.

Pullet, Two Entries—First and second, (3) and (24), Weir Hart.

Pen Fowls, One Entry—First, (33, 17, 21, 25, 11), Weir Hart

Pen Chicks, One Entry—First, (35, 8, 12, 16, 10), Weir Hart.

DARK BRAHMA.

Hen, Two Entries—First and second, (12) and (13), Edward Hansen.

BUFF COCHIN.

Cock, One Entry—First, R. V. Keeney.

Hen, Two Entries—First and second, R. V. Keeney.

Pullet, Two Entries—First and second, (14) and (15), Edward Hansen.

PARTRIDGE COCHIN.

Cock, Two Entries—First, (30), Earl Smiley; second, (1), R. V. Keeney.

Hen, Three Entries—First, (12), Earl Smiley.

Pullet, One Entry—First, (16), Edward Hansen.

WHITE COCHIN.

Cock, One Entry—First, (76), Earl Smiley.

Hen, One Entry—First, (17), Edward Hansen.

BLACK COCHIN.

Cock, Two Entries—First, (76), Earl Smiley; second, (18), Edward Hansen.

Hen, One Entry, First, (54), Earl Smiley.

BLACK LANGSHANG.

Cock, Five Entries—First, (192), Chester L. Mason, Early, Iowa; second, (13), Earl Smiley; third, (12), W. Patterson, Carlisle, Iowa.

Cockerel, Ten Entries—First, (81), C. E. Wicklund, Marshalltown, Ia.; second, (26), Weir Hart; third, (196), Earl Smiley.

Hen, Eight Entries—First, (262), Chester L. Mason; second, (27), C. E. Wicklund; third, (76), Earl Smiley.

Pullet, Seven Entries—First, (4), Weir Hart; second, (83), C. E. Wicklund; third, (106), Earl Smiley.

Pen Chicks, Two Entries—First, (35, 45, 1, 36, 38), Weir Hart; second, (1, 2, 3, 4, 5), W. Patterson.

WHITE LANGSHANG.

Cock, Five Entries—First, second and third, (94), (95) and (92), Floyd R. Ellis, Beaver Crossing, Neb.

Cockerel, Three Entries—First, (94), second, (95), third, (92), Floyd R. Ellis.

Hen, Six Entries—First, (80), Floyd R. Ellis; second and third, (30) and (33), R. V. Keeney.

Pullet, Three Entries—First, second and third, (73), (97) and (74), Floyd R. Ellis.

MEDITERRANEAN.

EXHIBITORS—F. W. Johnson, Monroe; Mrs. Monroe Marts, Ottumwa; Edward Hanson, Dean; Robert Lamphere, Utica, Neb.; Bonnie H. Lunnon, Des Monies; C. D. Joslin, Holstein; H. E. Williamson, Dubuque; Mrs. C. D. Hunt, Des Moines; H. Williamson, Dubuque; N. H. Harvey, Des Moines; C. R. Hopkins, Osage; J. M. Williamson, Des Moines; Charles C. Sherlock, Des Moines; J. A. Davis, Des Moines; S. E. Munson, Omaha, Neb.; O. L. Beeks, Des Moines; Hyperion White Leghorn Farm, Des Moines; Wm. H. Hodge, Des Moines; Marshall Ashworth, Des Moines; W. D. Hancock, Des Moines; White Wing Poultry Farm, Perry; Mrs. W. H. Eckles, Des Monies; O. E. Ingle, Bondurant; Mrs. H. Hoskins, Fairfield; T. L. Jones, Boone; M. C. Rogers, North Platte, Neb.; Murray McMurray, Webster City; H. L. Boge, Harvard, Neb.; F. L. Rinehard & Son, Ottumwa; J. S. Young, Redfield; J. R. Garrity, Des Moines; Mrs. H. H. Mugge, Des Moines; W. J. Coffin & Son, Waverly; Roy Nelson, Utica, Neb.; Geo. S. Jenks, Waterloo.

SWEEPSTAKES.

White Leghorn Cockerel—(92), H. E. Williamson, Dubuque, Iowa.

Ancona Pullet—(87), Mrs. H. H. Mugge, Des Moines, Iowa.

Flocks, Three Entries—First, (110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120), J. M. Williamson, Des Moines, Iowa; second, (200, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199), William J. Hadge, Des Moines, Iowa; third, (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11), Bonnie H. Lunnon, Des Moines, Iowa.

SINGLE COMB BROWN LEGHORN.

Cock, Four Entries—First, (226), Mrs. Monroe Marts, Ottumwa, Iowa; second and third, (25) and (21), F. W. Johnson, Monroe, Iowa.

Cockerel, Five Entries—First, (227), Mrs. Monroe Marts; second, (47), F. W. Johnson; third, (59), Robert Lamphere.

Hen, Four Entries—First, second and third, (1), (2), (3), Bonnie H. Lunnon.

Pullet, One Entry—First, (32), F. W. Johnson.

Pen Fowls, Two Entries—First, (228, 228, 230, 131, 232), Bonnie H. Lunnon; second, (1, 2, 3, 4, 5), Mrs. Monroe Marts.

Pen Chicks, One Entry—First, (233, 234, 235, 236, 237), Mrs. Monroe Marts.

ROSE COMB BROWN LEGHORN.

Cock, One Entry—First, (65), C. D. Joslin, Holstein, Iowa.

Cockerel, One Entry—First, (54), C. D. Joslin.

Hen, One Entry—First, (92), C. D. Joslin.

Pullet, One Entry—First, (39), C. D. Joslin.

SINGLE COMB WHITE LEGHORN.

Cock, Ten Entries—First, second and third, (2), (5) and (2), H E. Williamson.

Cockerel, Nineteen Entries—First, second and third, (92), (96), (94), H. E. Williamson.

Hen, Sixteen Entries—First, second and third, (196), (38), (37), H. E. Williamson.

Pullet, Twenty Entries—First, (178), Wm. Hadge; second, (200), Robert Lamphere; third, (132), H. E. Williamson.

Pen Fowls, Three Entries—First, (5, 7, 8, 9, 10), W. D. Hancock, Des Moines; second, (1, 2, 3, 4, 8), Mrs. C. D. Hunt, Des Moines.

Pen Chicks, Seven Entries—First, (180, 181, 182, 183, 184), Wm. Hadge; second, (73, 60, 65, 68, 69), Marshall Ashworth, Des Moines, Iowa; third, (71, 51, 52, 53, 54), O. L. Beeks, Des Moines, Iowa.

ROSE COMB WHITE LEGHORN.

Cock, One Entry—First, (21), Edward Hansen.

Cockerel, Two Entries—First, (9), second, (46), R. V. Keeney.

Hen, Three Entries—First, (217), Edward Hansen; second, (47), third, (48), R. V. Keeney.

Pullet Two Entries—First, (49), second, (18), R. V. Keeney.

SINGLE COMB BUFF LEGHORN.

Cock, Two Entries—First. R. V. Keeney; second, (10). O. E. Ingle, Bondurant.

Cockerel, Six Entries—First, (20), O. E. Ingle; second, 65), third. (66), Mrs. H. Hoskins.

Pen, Eight Entries—First, (63), second, (64), Mrs. H. Hoskins; third, (2), O. E. Ingle.

Pullet, Seven Entries—First, (25), second, (26), O. E. Ingle; third, (62), Mrs. H. Hoskins.

Pen Fowls, Two Entries—First. (51, 52, 53, 54, 55), Mrs. H. Hoskins; second, (4, 5, 6, 7, 8), O. E. Ingle.

Pen Chicks, Three Entries—First, (14, 51, 16, 17, 18), third, (9, 10, 11, 12, 13), O. E. Ingle; second, (56, 57, 58, 59, 60), Mrs. H. Hoskins.

SINGLE COMB BLACK LEGHORN.

Cock, One Entry—First (192), Earl Smiley.

Hen, Four Entries—First (127), second (372), Earl Smiley; third (23), Edward Hansen.

SICILIAN BUTTERCUP.

Hen, One Entry—First (25), Edward Hansen.

SINGLE COMB BLACK MINORCA.

Cock, Three Entries—First, (1), P. L. Jones, Boone, Iowa; second, (153), M. C. Rogers.

Cockerel, Four Entries—First, (25), second, (19), Murray McMurray, Webster City, Iowa; third, (17), R. V. Keeney.

Pen, Eight Entries—First, (26), Edward Hansen; second, (5), third (11), O. L. Jones.

Pullet, Two Entries—First, (8), second, (10), R. V. Keeney.

ROSE COMB BLACK MINORCA.

Hen, Four Entries—First, (190), F. L. Reinhard & Son; second, (199), third, (17), H. L. Boge.

SINGLE COMB WHITE MINORCA.

Cock, One Entry—First, (7), R. V. Keeney.

Hen, Three Entries—First, (7), third, (4), R. V. Keeney; second, (44), Robert Lamphere.

WHITE FACED BLACK SPANISH.

Cock, Five Entries—First, (27), Edward Hansen.

Cockerel, Two Entries—First, R. V. Keeney.

Hen, Five Entries—First, (75), second, (95), Earl Smiley; third, (28), Edward Hansen.

Pullet, Two Entries—First, R. V. Keeney; second, no award.

BLUE ANDALUSIAN.

Cock, Four Entries—First, (68), third, (24), C. M. Rogers; second, (55), J. S. Young, Redfield, Iowa.

Cockerel, Two Entries—First, (61), second, (4), J. F. Young.

Hen, Four Entries—First, (186), second (21), M. C. Rogers; third, (91), J. S. Young.

Pullet, Two Entries—First, (63), second, (79), J. F. Young.

ANCONA.

Cock, Two Entries—First, (95), J. R. Garrity, Des Monies, Iowa; second, (29), Edward Hanson.

Cockerel, Eight Entries—First, (47), Ray Nelson; second, (238), Mrs. Monroe Marts; third, (97), J. R. Garrity.

Hen, Two Entries—First, (99), J. R. Garrity; second, (31), Edward Hanson.

Pullet, Thirteen Entries—First, (87), third, (86), Mrs. H. H. Mugge; second, (96), W. J. Coffin & Sons.

Pen Chicks, One Entry—First, (240, 241, 242, 243, 244), Mrs. Monroe Marts.

SILVER CAMPINES.

Cock, One Entry—First, (44), Earl Smiley.

Cockerel, Three Entries—First, (245), second, (247), third, (247), Mrs. Monroe Marts.

Hen, One Entry—First, F. L. Reinhard & Son.

Pullet, Three Entries—First, (248), second, (249), third, (250), Mrs. Monroe Marts.

ENGLISH.

Exhibitors—Edward Hanson, Dean; Erle Smiley, Beaver Crossing, Neb.; Floyd R. Ellis, Beaver Crossing, Neb.; August Peterson, Farnhamville; R. C. Roup & Sons, Ames; H. T. Farrar, Ames; O. M. Brown, Slater; Wahlig & Dowell, Davenport; Cal Freel, Runnells; Schaaf 1733 Ranch, Kearney, Neb.; Jesse L. Gordon, Springvalley, Minn.; B. O'Keen, Ankeny; F. L. Reinhard & Son, Ottumwa; Dr. G. H. Humphrey, Woodbine; John Ulrich, Jr., Pella; W. H. Dunn, Altoona; Chas. H. Duer, Eagle Grove; Griffith Bros., Des Moines; R. V. Keeney, Des Moines; John Budd, Jr., Des Moines; Otto Hamp, Beaver Crossing, Neb.; J. H. Ross, Lehigh; Fred G. Reis, Indianola; George Dickey, Rock Island, Ill.; Ed. J. Erickson, Howard, Neb.

SWEEPSTAKES.

White Orpington Cockerel (4446) Schaaf 1733 Ranch.

Buff Orpington Pullet (26), R. T. Farrar, Ames, Iowa.

Flock, One Entry—First, R. C. Roup & Son, Ames, Iowa.

WHITE DORKING.

Hen, One Entry—First, (33), Edward Hanson.

SILVER GRAY DORKING.

Cock, One Entry—First, (8), Earl Smiley.

Hen, Three Entries—First, (67), third, (183), Earl Smiley; second, (34), Edward Hanson.

COLORED DORKING.

Cock, One Entry—First, (121), Earl Smiley.

ROSE COMB RED CAP.

Hen, One Entry—First, (35), Edward Hanson.

SPECKLED SUSSEX.

Cockerel, Two Entries—First, (99), second, (96), Floyd R. Ellis.

Hen, One Entry—First, (11), Floyd R. Ellis.

Pullet, One Entry—First, (84), Floyd R. Ellis.

SINGLE COMB BUFF ORPINGTON.

Cock, Eleven Entries—First, (50), second, (48), third, (49), O. M. Brown, Slater, Iowa.

Cockerel, Nine Entries—First, (51),, H. T. Farrar; second, (38), Wahlig & Dow, Davenport, Iowa; third, (45), O. M. Brown.

Hen, Ten Entries—First, (87), Wahlig & Dow; second, (38), third, (39), O. M. Brown.

Pullet, Thirteen Entries—First, (26), H. T. Farrar; second, (47), O. M. Brown; third, (8), Jessie F. Gordon, Spring Valley, Minn.

Pen Fowls, Four Entries—First, (2156, 2175, 4371, 3664, 2153), Wahlig & Dow; second, (68, 213, 31, 33, 36, 37), Schaaf 1733 Ranch; third, (1, 2, 3, 4, 5), Cal Freel, Runnells, Iowa.

Pen Chicks, Four Entries—First, (63, 64, 65, 66, 67), H. T. Farrar; second, (40, 41, 42, 4, 3, 44), O. M. Brown.

SINGLE COMB BLACK ORPINGTON.

Cock, Two Entries—First, (35), O. M. Brown; second, (46), F. L. Reinhard.

Hen, Seven Entries—First, (32), Dr. G. H. Humphrey, Woodbine, Iowa; second, (37), O. M. Brown; third, (646), John Ulrich, Jr., Pella, Iowa.

Pullet, Three Entries—First, (23), third, (24), Jesse F. Gordon; second, (96), John Ulrich, Jr.

Pen Chicks, Two Entries—First, (47, 46, 48, 52, 21), John Ulrich, Jr.; second, (22, 31, 30, 33, 34), O. M. Brown.

SINGLE COMB WHITE ORPINGTON.

Cock, Seven Entries—First, (8524), Chas. H. Duer; second, (26), Griffith Bros., Des Moines, Iowa; third, (91), W. H. Dunn, Altoona, Iowa.

Cockerel, Fourteen Entries—First, (4446), third, (4487), Schaaf 1733 Ranch; second, (68468), J. H. Ross, Lehigh, Iowa.

Hen, Eleven Entries—First, (100), W. H. Dunn; second, (3677), third, (1926), Schaaf 1733 Ranch.

Pullet, Eleven Entries—First, (4463), second, (4457), Schaaf 1733 Ranch; third, (52), Chas. Duer.

Pen Fowls, Two Entries—First, (4968, 3909, 8519-1, 4473, 1930), Schaaf 1733 Ranch.

Pen Chicks, Four Entries—First, (4452, 4454, 4462, 4476, 4459), Schaaf 1733 Ranch; second, (97, 34, 84, 81, 64), W. H. Dunn; third, (127, 131, 138, 142, 144), John Budd, Jr., Des Moines, Iowa.

DARK CORNISH.

Cock, Six Entries—First, (194), second, (82), third, (25), Floyd Ellis.

Cockerel, Seven Entries—First, (100), second, (8), Floyd R. Ellis; third, (37), Edward Hansen.

Hen, Five Entries—First, (83), second, (81), third, (1333), Floyd R. Ellis.

Pullet, Six Entries—First, (16), second, (15), third, (14), Floyd R. Ellis.

Pen Fowls, Four Entries—First, (6, 7, 8, 9, 10), second, (11, 12, 13, 14, 15), third, (1, 2, 3, 4, 5), Geo. Dickey, Rock Island, Ill.

Pen Chicks, One Entry—First, 290, 291, 292, 293, 294), Fred G. Reis, Indianola, Iowa.

WHITE CORNISH.

Cock, One Entry—First, (15), E. J. Erickson.

Cockerel, Two Entries—First, (18), second, (19), E. J. Erickson.

Hen, Two Entries—First, (16), second, (17), E. J. Erickson.

Pullet, Two Entries—First, (20), second, (21), E. J. Erickson.

POLISH.

EXHIBITORS—R. V. Warner, Altoona; Edward Hanson, Dean; Roy Nelson, Utica, Neb.; Robert Lamphere, Utica, Neb.

WHITE CRESTED BLACK POLISH.

Cock, One Entry—First, (60), R. V. Keeney.

Cockerel, One Entry—First, (61), Edward Hansen.

Hen, One Entry—First, (62), Edward Hansen.

BEARDED GOLDEN POLISH.

Cockerel, Four Entries—First, (374), Ray Nelson; second, (57), third, (56), Edward Hansen.

Pullet, Four Entries—First, (57), second, (60), Edward Hansen; third, (344), Ray Nelson.

BEARDED SILVER POLISH.

Cock, One Entry—First, (156), Robert Lamphere.

Hen, One Entry—First, (29), Robert Lamphere.

BEARDED WHITE POLISH.

Cockerel, One Entry—First, (55), Edward Hansen.

Pullet, One Entry—First, (56), Edward Hansen.

BUFF LACED POLISH.

Hen, Two Entries—First, (4), Robert Lamphere; second, (41), Edward Hansen.

NON-BEARDED GOLDEN POLISH.

Cock, One Entry—First, (27), Robert Lamphere.

Cockerel, Two Entries—First, (32), second, (41), Robert Lamphere.

Hen, Two Entries—First, (155), second (102), Robert Lamphere.

Pullet, Two Entries—First, (18), second (2), Robert Lamphere.

NON-BEARDED SILVER POLISH.

Cock, Two Entries—First, (43), second, (42), Edward Hansen.

Cockerel, Two Entries—First, (46), second, (47), Edward Hansen.

Hen, Three Entries—First, (56), Robert Lamphere; second, (44), third, (45), Edward Hansen.

Pullet, Two Entries—First, (48), second, (49), Edward Hansen.

NON-BEARDED WHITE POLISH.

Cock, Two Entries—First, (50), second, (51), Edward Hansen.

Cockerel, One Entry—First, (52), Edward Hansen.

Hen, Two Entries—First, (53), second, (54), Edward Hansen.

Pullet, One Entry—First, (53), Edward Hansen.

DUTCH.

EXHIBITORS—Griffith Bros., Des Moines; Edward Hanson, Dean; Roy Nelson. Utica, Neb.; Waldo Pence, Marshalltown; R. V. Keeney, Altoona; M. C. Rogers, North Platte, Neb.; Robert Lamphere, Utica, Neb.

GOLDEN SPANGLED HAMBURG.

Hen, One Entry—First, (63), Edward Hansen.

SILVER SPANGLED HAMBURG.

Cock, Three Entries First, (369), second, (331), Roy Nelson; third, (0), R. V. Keeney.

Cockerel, Five Entries—First, (0), R. V. Keeney; second, (12), third, (46), Waldo Pence.

Hen, Five Entries—First, (371), second, (376), Ray Nelson; third, (36), Griffith Bros.

Pullet, Three Entries—First, (335), second, (379), Ray Nelson; third, (9), Waldo Pence.

GOLDEN PENCILED HAMBURG.

Cock, One Entry—First, (185), M. C. Rogers.

Cockerel, Two Entries—First, (66), second, (65), Edward Hansen.

Hen, Two Entries—First, (68), Edward Hansen.

Pullet, Two Entries—First, (67), second, (68), Edward Hansen.

SILVER PENCILED HAMBURG.

Cock, One Entry—First, (69), Edward Hansen.

Cockerel, Two Entries—First, (70), second, (71), Edward Hansen.

Hen, Two Entries—First, (22), second, (73), Edward Hansen.

Pullet, Two Entries—First, (74), second, (75), Edward Hansen.

BLACK HAMBURG.

Cock, One Entry—First, (42), Robert Lamphere.

Hen, Three Entries—First, (78), Robert Lamphere; second, (110), third, (120), Edward Hansen.

FRENCH.

Exhibitors—Mrs. W. C. De Moss, Des Moines; Robert Lamphere, Utica, Neb.; R. V. Keeney, Altoona; Edward Hanson, Dean.

MOTTLED HOUDAN.

Cock, Three Entries—First, (78), Mrs. W. C. De Moss, Des Moines, Iowa; second, (178), Robert Lamphere; third, (0), R. V. Keeney.

Cockerel, Three Entries—First, (0), R. V. Keeney; second, (76), third, (79), Mrs. W. C. De Moss.

Hen, Three Entries—First, (95), Robert Lamphere; second, (77), Mrs. W. C. De Moss.

Pullet, Three Entries—First, (80), second, (82), Mrs. W. C. De Moss; third, (0), R. V. Keeney.

BLACK CREVECOEUR.

Hen, One Entry—First, (76), Edward Hansen.

BLACK LAFLECHE.

Cock, One Entry—First, (77), Edward Hansen.

Hen, Two Entries—First, (79), second, (80), Edward Hansen.

GAMES AND GAME BANTAMS.

BLACK BREASTED RED GAME BANTAMS.

Exhibitors—Mr. & Mrs. Frank Harris, Des Moines; Erle Smiley, Beaver Crossing, Neb.

Cock, Two Entries—First, (30), second, (33), Mr. & Mrs. Frank Harris, Des Moines, Iowa.

Cockerel, Two Entries—First, (104), second, (107), Mr. & Mrs. Frank Harris.

Hen, Three Entries—First, (12), Earl Smiley; second, (2), third, (97), Mr. & Mrs. Frank Harris.

Pullet, Three Entries—First, (978), third, (983), Mr. & Mrs. Frank Harris; second, (8), Earl Smiley.

BROWN RED GAME BANTAMS.

EXHIBITORS—Erle Smiley, Beaver Crossing, Neb.; Edward Hanson, Dean.

Cock, One Entry—First, (9), Earl Smiley.

Hen, Three Entries—First, (3), second, (9), Earl Smiley; third, (87), Edward Hansen.

GOLDEN DUCK WING GAME BANTAMS.

EXHIBITORS—Erle Smiley, Beaver Crossing, Neb.

Cockerel, One Entry—First, (2), Earl Smiley.

BIRCHEN GAME BANTAMS.

EXHIBITORS—Erle Smiley, Beaver Crossing, Neb.

Hen, One Entry—First, (10), Earl Smiley.

RED PYLE GAME BANTAMS.

EXHIBITORS—Otto Hamp, Beaver Crossing, Neb.

Cock, One Entry—First, (4), Otto Hamp, Beaver Crossing, Neb.

Hen, Two Entries—First, (7607), second, (0), Otto Hamp.

WHITE GAME BANTAMS.

EXHIBITORS—Otto Hamp, Beaver Crossing, Neb.

Cock, One Entry—First, (88), Otto Hamp.

Hen, Two Entries—First, (1), second, (2), Otto Hamp.

BLACK SUMATRA.

EXHIBITORS—Edward Hanson, Dean.

Cock, Two Entries—First, (81), Edward Hansen.

Hen, One Entry—First, (83), Edward Hansen.

ORNAMENTAL GAMES AND BANTAMS.

GOLDEN SEABRIGHT BANTAMS.

EXHIBITORS—R. V. Keeney, Altoona; F. L. Reinhard & Son, Ottumwa; Otto Hamp, Beaver Crossing, Neb.

Cock, Four Entries—First, (31), R. V. Keeney; second, (26), F. L. Reinhard & Son; third, (42), Otto Hamp.

Cockerel, Three Entries—First, (46), second, (47), F. L. Reinhard & Son; third, (0), R. V. Keeney.

Hen, Four Entries—First, (158), F. L. Reinhard & Son; second, (44), third, (45), Otto Hamp.

Pullet, Three Entries—First, (21), second, (18), F. L. Reinhard & Son; third, (0), R. V. Keeney.

SILVER SEABRIGHT BANTAMS.

Exhibitors—F. L. Reinhard, Ottumwa.

Cock, One Entry—First, (148), F. L. Reinhardt & Son.

Cockerel, One Entry—First, (31), F. L. Reinhardt & Son.

Hen, One Entry—First, (150), F. L. Reinhard & Son.

Pullet, One Entry—First, (129), F. L. Reinhard & Son.

WHITE ROSE COMB.

Exhibitors—F. L. Reinhard and Son, Ottumwa.

Hen, Two Entries—First, (12), second, (20), F. L. Reinhard & Son.

ROSE COMB BLACK BANTAMS.

Exhibitors—Mr. & Mrs. Frank Harris, Des Moines; H. L. Boge, Harvard, Neb.; H. M. Buck, Prairie City.

Cock, Four Entries—First, (19), Mr. & Mrs. Frank Harris; second, (63), H. L. Boge; third, (0), H. M. Buck.

Cockerel, Three Entries—First, (10), second, (2), Mr. & Mrs. Frank Harris.

Hen, Three Entries—First, (19), second, (3), Mr. & Mrs. Frank Harris; third, (4), H. M. Buck.

Pullet, Two Entries—First, (5), second, (15), Mr. & Mrs. Frank Harris.

WHITE BOOTED.

Exhibitors—Otto Hamp, Beaver Crossing, Neb.; F. L. Reinhard and Son. Ottumwa.

Cock, One Entry—First, (59), Otto Hamp.

Hen, Two Entries—First, (16), Otto Hamp; second, (0), F. L. Reinhard & Son.

DARK BRAHMA BANTAMS.

Exhibitors—Otto Hamp, Beaver Crossing, Neb.; Edward Hanson, Dean.

Cock, One Entry—First, (46), Otto Hamp.

Cockerel, One Entry—First, (49), Otto Hamp.

Hen, Three Entries—First, (46), second, (48), Otto Hamp; third, (85), Edward Hanson.

Pullet, Two Entries—First, (51), second, (52), Otto Hamp.

BUFF COCHIN BANTAMS.

Exhibitors—M. C. Rogers, North Platte, Neb.; F. L. Reinhard & Son, Ottumwa; H. L. Boge, Harvard, Neb.; Waldo Pence, Marshalltown.

Cock, Four Entries—First, (30), second, (29), M. C. Rogers; third, (0), F. L. Reinhard & Son.

Cockerel, Six Entries—First, (4), third, (3), H. L. Boge; second, (90), Waldo Pence.

Hen, Nine Entries—First, (45), second, (47), third, (11), Waldo Pence.

Pullet, Two Entries—First, (78), second, (5), third, (0), F. L. Reinhard & Son.

WHITE COCHIN BANTAMS.

Exhibitors—Waldo Pence, Marshalltown; Ed. J. Erickson, Harvard, Neb.; Griffith Bros., Des Moines.

Cock, Three Entries—First, (9), Waldo Pence; second, (10), third, (61), Ed. J. Erickson.

Cockerel, Five Entries—First, (3), Waldo Pence; second, (12), third, (13), E. J. Erickson.

Hen, Five Entries—First, (80), third, (82), Waldo Pence; second, (37), Griffith Bros.

Pullet, Three Entries—First, (8), Waldo Pence; second, (14), third, (15), E. J. Erickson.

BLACK COCHIN BANTAMS.

Exhibitors—Wm. Monahan, Des Moines; H. L. Boge, Harvard, Neb.; Waldo Pence, Marshalltown; F. L. Reinhard & Son, Ottumwa.

Cock, Three Entries—First, (243), Wm. Monahan; second (8), H. L. Boge; third, (92), Waldo Pence.

Cockerel, Three Entries—First, (69), third, (95), Wm. Monahan; second, (49), F. L. Reinhard & Son.

Hen, Six Entries—First, (233), second, (235), Wm. Monahan; third, (8), Waldo, Pence.

Pullet, Four Entries—First, (2), second, (16), third, (11), Wm. Monahan.

WHITE JAPANESE.

Exhibitors—E. J. Erickson, Harvard, Neb.

Cock, One Entry—First, (20), E. J. Erickson.

BLACK JAPANESE BANTAMS.

Exhibitors—Roy Nelson, Utica, Neb.

Cockerel, Two Entries—First, (66), second, (65), Roy Nelson.

Hen, Two Entries—First, (63), second, (64), Roy Nelson.

Pullet, Two Entries—First, (67), second, (68), Roy Nelson.

BEARDED WHITE POLISH BANTAM.

Exhibitors—Roy Nelson, Utica, Neb.

Hen, Two Entries—First, (34), second, (41), Roy Nelson.

BUFF LACED POLISH BANTAMS.

Exhibitors—M. C. Rogers, North Platte, Neb.

Cock, Two Entries—First, (33), second, (34), M. C. Rogers.

Cockerel, Two Entries—First, (36), second, (37), M. C. Rogers.

Hen, One Entry—First, (35), M. C. Rogers.

Pullet, Two Entries—First, (38), second, (30), M. C. Rogers.

NON BEARDED POLISH BANTAM.

Exhibitors—Floyd R. Ellis, Beaver Crossing, Neb.

Cock, Two Entries—First, (32), second, (53), Floyd R. Ellis.

Cockerel, Two Entries—First, (55), second, (65), Floyd R. Ellis.

Hen, Two Entries—First, (54), second, (10), Floyd R. Ellis.

Pullet, Two Entries—First, (56), second, (58), Floyd R. Ellis.

WHITE SILKIES.

Exhibitors—William Monahan, Des Moines; Waldo Pence, Marshalltown; Ed. J. Erickson, Harvard, Neb.

Cock, Two Entries—First, (1), Wm. Monahan; second, (28), Waldo Pence.

Cockerel, Two Entries—First, (25), second, (26), Ed. J. Erickson.

Hen, Two Entries—First, (45), second, (24), Waldo Pence.

Pullet, Two Entries—First, (27), second, (28), Ed. J. Erickson.

ANY COLOR FRIZZIE.

EXHIBITORS—F. L. Reinhard & Son, Ottumwa.

Cockerel, One Entry—First, (0), F. L. Reinhard & Son.

Pullet, One Entry—First, (17), F. L. Reinhard & Son.

CAPONS.

EXHIBITORS—C. D. Warren, Altoona; Otto Hamp, Beaver Crossing, Neb.; F. L. Reinhard & Son, Ottumwa.

Three Entries—First, (12), C. D. Warren, Altoona, Iowa; second, (8), C. D. Warren; third, (14), Otto Hamp.

SWALLOW PIGEONS.

EXHIBITORS—F. L. Reinhard & Son, Ottumwa.

Pair, Two Entries—First, F. L. Reinhard & Son; second, F. L. Reinhard & Son.

TURBET PIGEONS.

EXHIBITORS—F. L. Reinhard & Son, Ottumwa.

Pair, Two Entries—First and second, F. L. Reinhard & Son.

TURKEYS.

BRONZE.

EXHIBITORS—R. V. Keeney, Altoona; Margaret Dunlap, Valley Junction.

Cockerel, One Entry—First, (180), Margaret Dunlap, Valley Junction, Ia.

Hen, One Entry—First, R. V. Keeney.

Pullet, One Entry—First, (193), Margaret Dunlap.

WHITE HOLLAND.

EXHIBITORS—Millard Thompson, Polk.

Cock, One Entry—First, (100), Millard Thompson, Polk, Iowa.

Cockerel, One Entry—First, (50), Millard Thompson.

Hen, One Entry—First, (0), Millard Thompson.

Pullet, One Entry—First, (25), Millard Thompson.

DUCKS.

WHITE PEKIN.

EXHIBITORS—Ed. J. Erickson, Harvard, Neb.; Chester L. Mason, Early; R. V. Keeney, Altoona; F. F. Warner & Son, Bloomfield.

Old Drake, Six Entries—First, (297), Chester L. Mason; second, (23), F. F. Warner & Son; third, (23), R. V. Keeney.

Young Drake, Three Entries—First, (49), second, (26), F. F. Warner & Sons.

Old Duck, Six Entries—First, (294), Chester L. Mason; second, (23), Ed. J. Erickson; third, (20), F. F. Warner & Son.

Young Duck, Two Entries—First, (45), second, (28), F. F. Warner & Sons.

WHITE AYLESBURY.

EXHIBITORS—Robt. Lamphere, Utica, Neb.

Young Drake, Two Entries—First, (43), second, (40), Robert Lamphere.

Young Duck, Two Entries—First, (49), second, (26), Robert Lamphere.

COLORED ROUEN.

EXHIBITORS—Robt. Lamphere, Utica, Neb.

Old Drake, One Entry—First, (44), Robert Lamphere.

BLACK CAYUGA.

EXHIBITORS—R. E. West, Altoona; Edward Hanson, Dean.

Old Drake, One Entry—First, (40), R. E. West, Altoona, Iowa.

Young Drake, Two Entries—First, (89), second, (90), Edward Hanson.

Old Duck, Two Entries—First, (70), second, (20), R. E. West.

Young Duck, Two Entries—First, (90), second, (92), Edward Hanson.

GRAY CALL.

EXHIBITORS—M. C. Rogers, North Platte, Neb.; E. M. Dickey, Des Moines; Edward Hanson, Dean.

Old Drake, Five Entries—First and second, E. M. Dickey, Des Moines; third, (11), M. C. Rogers.

Young Drake, One Entry—First, E. M. Dickey.

Old Duck, Four Entries—First and second, E. M. Dickey; third, (13), M. C. Rogers.

Young Duck, One Entry—First, E. M. Dickey.

WHITE CALL.

EXHIBITORS—Edward Hanson, Dean.

Old Duck, Two Entries—First, (94), second, (95), Edward Hanson.

BLACK EAST INDIA.

EXHIBITORS—Edward Hanson, Dean.

Old Drake, Two Entries—First, (96), second, (97), Edward Hanson.

Young Drake, Two Entries—First, (98), second, (99), Edward Hanson.

Old Duck, Two Entries—First, (100), second, (101), Edward Hanson.

Young Duck, Two Entries—First, (102), second, (103), Edward Hanson.

WHITE CRESTED.

EXHIBITORS—Ray Nelson, Utica, Neb.; Edward Hanson, Dean.

Old Drake, Two Entries—First, (377), second, (378), Ray Nelson.

Old Duck, Two Entries—First, (104), Edward Hanson; second, (376), Ray Nelson.

COLORED MUSCOVY.

EXHIBITORS—R. E. West, Altoona; H. M. Buck, Prairie City.

Old Drake, Two Entries—First, (48), H. M. Buck; second, (3), R. E. West.

Young Drake, One Entry—First, (79), R. E. West.

Young Duck, Two Entries—First, (74), second, (78), R. E. West.

WHITE MUSCOVY.

EXHIBITORS—Ed. J. Erickson, Harvard, Neb.; R. V. Keeney, Altoona; R. E. West, Altoona.

Old Drake, Three Entries—First, (29), R. V. Keeney; second, (24), E. J. Erickson; third, (5), R. E. West.

Old Duck, Four Entries—First, (28), R. V. Keeney; second, (75), R. E. West; third, Band (26), E. J. Erickson.

FAWN AND WHITE INDIAN RUNNER.

Exhibitors—Mrs. C. D. Hunt, Des Moines; H. L. Boge, Harvard, Neb.; R. V. Keeney, Altoona; F. L. Reinhard & Son, Ottumwa.

Old Drake, Five Entries—First, (9), Mrs. C. D. Hunt; second, (0), F. L. Reinhard & Son; third, (91), H. L. Boge.

Young Drake, Three Entries—First, (0), third, (0), F. L. Reinhard & Son; second, (11), Mrs. C. D. Hunt.

Old Duck, Seven Entries—First, (0), F. L. Reinhard & Son; second, (77), H. L. Boge; third, (4), Mrs. C. D. Hunt.

Young Duck, Two Entries—First and second, F. L. Reinhard & Son.

WHITE INDIAN RUNNER.

Exhibitors—J. W. Johnson, Monroe; F. L. Reinhard & Son, Ottumwa; Edward Hanson, Dean.

Old Drake, Three Entries—First, (105), Edward Hanson; second, (31), J. W. Johnson; third, (0), F. L. Reinhard & Son.

Young Drake, Two Entries—First, (0), F. L. Reinhard & Son; second, (106), F. L. Reinhard & Son.

Old Duck, One Entry—First, (0), F. L. Reinhard & Son.

Young Duck, One Entry—First, (0), F. L. Reinhard & Son.

BLUE SWEDISH.

Exhibitors—Ray Nelson, Utica, Neb.

Old Drake, Two Entries—First, (50), second, (46), Ray Nelson.

Young Drake, Two Entries—First, (65), second, (66), Ray Nelson.

Old Duck, Two Entries—First, (63), second, (64), Ray Nelson.

Young Duck, Two Entries—First, (76), second, (68), Ray Nelson.

GEESE.

GRAY TOULOUSE.

Exhibitors—Griffith Bros., Des Moines; Otto Hamp, Beaver Crossing, Neb.; F. L. Reinhard & Son, Ottumwa; R. V. Keeney, Altoona; R. E. West, Altoona; Floyd R. Ellis, Beaver Crossing, Neb.; Mrs. D. C. Young, Des Monies.

Old Gander, Six Entries—First, (2), third, (3), Otto Hamp; second, F. L. Reinhard & Son.

Young Gander, Six Entries—First, (9), second, (8), Floyd R. Ellis; third, (318). Mrs. D. C. Young, Des Moines, Iowa.

Old Goose, Five Entries—First, F. L. Reinhard & Son; second, (1), third, (5), Otto Hamp.

Young Goose, Five Entries—First, (10), second, (11), Floyd R. Ellis; third, (317), Mrs. D. C. Young.

WHITE EMBDEN.

Exhibitors—Floyd R. Ellis, Beaver Crossing, Neb.; O. C. Bierma, Altoona; E. J. Heberling, Des Monies; F. L. Reinhard & Son, Ottumwa.

Old Gander, Four Entries—First, (2), Floyd R. Ellis; second, (35), O. C. Bierma, Altoona, Iowa; third, F. L. Reinhard & Son.

Young Gander, Five Entries—First, (5), second, (6), Floyd R. Ellis; third, F. L. Reinhard & Son.

Old Goose, Four Entries—First, (4), Floyd R. Ellis; second, F. L. Reinhard & Son; third, (28), O. C. Bierma.

Young Goose, Four Entries—First, (7), second, (12), Floyd R. Ellis.

GRAY AFRICAN.

EXHIBITORS—Robert Lamphere, Utica, Neb.; F. L. Reinhard & Son, Ottumwa; E. J. Heberling, Des Moines; Edward Hanson, Dean.

Old Gander, Three Entries—First, (896), Robert Lamphere; second, E. J. Herberling, Des Moines, Iowa; third, F. L. Reinhard & Son.

Young Gander, Four Entries—First, (107), second, (108), Edward Hanson; third, (39), Robert Lamphere.

Old Goose, Three Entries—First, (4), Robert Lamphere; second, F. L. Reinhard & Son; third, E. J. Heberling.

Young Goose, Five Entries—First, (109), second, (110), Edward Hanson; third, (9), Robert Lamphere.

BROWN CHINESE.

EXHIBITORS—E. J. Heberling, Des Moines; Robert Lamphere, Utica, Neb.; R. E. West, Altoona.

Old Gander, Two Entries—First, (11), R. E. West; second, (37), Robert Lamphere.

Young Gander, Three Entries—First, (23), Robert Lamphere; second, (11), R. E. West; third, (24), Robert Lamphere.

Old Goose, Four Entries—First, (12), R. E. West; second, (25), third, (33), Robert Lamphere.

Young Goose, Three Entries—First, (3), second, (48), Robert Lamphere; third, (9), R. E. West.

WHITE CHINESE.

EXHIBITORS—F. L. Reinhard & Son, Ottumwa; Edward Hanson, Dean; R. E. West, Ottumwa.

Old Gander, Four Entries—First, F. L. Reinhard & Son; second, (11), third, (112), Edward Hanson.

Young Gander, Four Entries—First and second, F. L. Reinhard & Son; third, (113), Edward Hanson.

Old Goose, Four Entries—First, (115), second, (116), Edward Hanson; third, F. L. Reinhard & Son.

Young Goose, Four Entries—First and second, F. L. Reinhard & Son; third, (117), Edward Hanson.

GRAY WILD OR CANADIAN.

EXHIBITORS—D. M. Dickey, Des Moines.

Old Gander, Three Entries—First, second and third, D. M. Dickey.

Young Gander, Three Entries—First, second and third, D. M. Dickey.

RABBITS.

EXHIBITORS—O. B. Hinman, Des Moines; C. J. Cummins, Des Moines; E. N. Craft, Des Moines; Gale Dickinson, Marshalltown; Fairlawn Rabbitry, Lamoni; Chas. W. Sears, Omaha, Neb.; H. McIntyre, Des Moines; Leslie Wright, Des Moines; Russell Lundgren, Des Moines; Lewis Harvey, Des Moines; Wister & Rhoads, Des Moines; Keeney's Rabbitry, Des Moines; Jas. A. McCoy, Des Moines; M. L. Seeley, Waterloo; Cal Freel, Runnells; G. E. Thornton, Des Moines; C. R. Priest, Des Moines; Edw. Bruna, Cedar Rapids; E. R. Wallizer, Des Moines; Luther & Stanley, Adair; Mrs. Geo. Jolley, Des Moines; R. O. Turnbull, Haverhill; John Moehrl, Marshalltown; Donald Gose, Des Moines; Mrs. A. Wilson, Harlan; Wm. J. Scott, Des Moines; S. Walton Faye, Montezuma; Hendricks Rabbitry, Ottumwa; H. M. Corning, Waterloo; Lowell Armstrong, Zearing; F. W. Mason, Des Moines; Jos. Rambousek, Marshalltown; O. M. Brown, Slater.

ANGORAS.

Junior Buck, One Entry—First, (1), A. B. Hinman.

Junior Doe, One Entry—First, (1), A. B. Hinman.

AMERICAN BLUES.

Senior Buck, Four Entries—First, (15840), third, (15818), C. J. Cummins; second, (15821), E. N. Craft.

Senior Doe, Two Entries—First, (12), Fairlawn Rabbitry; second, (D42), Gale Dickson.

Junior Buck, Three Entries—First, (B), second, (A), E. N. Craft; third, (80), Fairlawn Rabbitry.

Junior Doe, Five Entries—First, (C), second, (D), E. N. Craft; third, (D44), Gale Dickson.

Buck Six to Eight Months, One Entry—First, (15), Chas. W. Sears.

Doe Six to Eight Months, Five Entries—First, (15842), second, (15841), C. J. Cummins; third, (8-9), Chas. W. Sears.

BELGIAN HARES.

Senior Buck, Fourteen Entries—First, (2M), Jas. A. McCoy; second, (24), third, (22), Louis Harvey.

Senior Doe, Thirteen Entries—First, (2L), Russell Lundgren; second, (15845), third, (15848), C. J. Cummins.

Junior Buck, Nine Entries—First, (1), E. N. Craft; second, (A-10-H), Jas. A. McCoy; third, (36), Wister & Rhoads.

Junior Doe, Thirteen Entries—First, (37), Wister & Rhoads; second, (3L), Russell Lundgren; third, (3M), Jas. A. McCoy.

BELGIAN HARES—HEAVYWEIGHT.

Senior Buck, Two Entries—First, Cal Freel; second, (15804), H. McIntyre.

Senior Doe, Two Entries—First, Not awarded; second, (7), third, (23), G. E. Thornton.

FLEMISH GIANTS—DARK STEEL GRAY.

Senior Buck, Three Entries—First, (1946), C. R. Priest; second, (13), G. E. Thornton; third, (15816), A. B. Hinman.

Senior Doe, Five Entries—First, (7), Keeney's Rabbitry; second, (10871), A. B. Hinman; third, (4911), C. R. Priest.

Buck Under Four Months, Three Entries—First, E. R. Walizer; second, (E1), Edw. Bruna; third, A. B. Hinman.

Buck Six to Eight Months, Three Entries—First, (2), second, (3), C. R. Priest.

FLEMISH GIANTS—GRAY.

Senior Buck, One Entry—First, (10865), Luther & Stanley.

Senior Doe, Five Entries—First, (10292), Luther & Stanley; second, (9), Keeney's Rabbitry.

Junior Buck, Three Entries—First, (9), Luther & Stanley.

Junior Doe, Three Entries—Second, (4), Luther & Stanley.

Buck Under Four Months, Two Entries—First, (7), Luther & Stanley.

Doe Under Four Months, Two Entries—First, (8), C. R. Priest.

Doe Six to Eight Months, One Entry—First, (11), R. O. Turnbull.

FLEMISH GIANTS—BLACK.

Buck Under Four Months, One Entry—First, (7), John E. Moehrl.

Doe Under Four Months, One Entry—First, (8), John E. Moehrl.

FLEMISH GIANTS—WHITE.

Senior Buck, One Entry—First, (16), R. O. Turnbull.

Buck Under Four Months, One Entry—First, (20), R. O. Turnbull.

Doe Six to Eight Months, One Entry—First, (219), R. O. Turnbull.

AMERICAN CHECKERED GIANTS.

Buck Under Four Months, One Entry—First, (E3), Edw. Bruna.

Doe Under Four Months, One Entry—First, (E4), Edw. Bruna.

HIMALAYANS.

Junior Buck, Three Entries—First, (2R), second, (1R), third, (3R), Russell Lundgren.

Junior Doe, Three Entries—First, (5R), second, (4R), third, (6R), Russell Lundgren.

NEW ZEALAND REDS.

Senior Buck, Seven Entries—First, (9145), second, (4565), Wm. J. Scott; third, (1), Fairlawn Rabbitry.

Senior Doe, Sixteen Entries—First, (9135), F. W. Mason; second, (5326), third, (15835), Wm. J. Scott.

Junior Buck, Twelve Entries—First, (3Z), Wm. J. Scott; second, (G3), third, (G4), F. W. Mason.

Junior Doe, Nineteen Entries—First, (7), Wm. J. Scott; second, (G11), third, (G5), F. W. Mason.

Buck Under Four Months, Three Entries—First, (6Z), Wm. J. Scott; second, (5), O. M. Brown.

Doe Under Four Months, Five Entries—First, (J45), Joe Rambausek; second, (3H), Wm. J. Scott; third, (F3), S. Walton Fay.

Buck Six to Eight Months, Four Entries—First, (15880), F. W. Mason; second, (Z3), Wm. J. Scott; third, (15844), C. J. Cummins.

Doe Six to Eight Months, Two Entries—First, (C2), second, (1H), Wm. J. Scott.

AGRICULTURAL AWARDS.

SUPERINTENDENT........................H. O. WEAVER, Wapello, Iowa

CORN.

JUDGE..P. C. TAFF.

NORTHERN DISTRICT.

Ten Ears, Yellow—First, Isaac Johnson, West Union; second, Fred J. Brunk, Sheldon.

Ten Ears, White—First, Theo Gronna, Waterville; second, Forest Christenson, Ringstead; third, Edward R. Mawdsley, Irvington; fourth, R. B. Brown, Inwood; fifth, Isaac Johnson, West Union; sixth, Fred J. Brunk, Sheldon.

Single Ear, Yellow—First, Fred J. Brunk; second, Isaac Johnson.

Single Ear, White—First, Theo Gronna; second, Forest Christenson; third, Fred J. Brunk; fourth, Isaac Johnson; fifth, Edward R. Mawdsley.

NORTH CENTRAL DISTRICT.

Ten Ears, Yellow—First, W. E. Brown, Salix; second, E. B. Glenny, Union;

third, W. J. Irving, Webster City; fourth, Willrich Jones, Adelphi; fifth, Emory Gustafson, Lanyan; sixth, H. F. Osterland, Ackley; seventh, C. R McClean, Union; eighth, Axel T. Anderson, Paton.

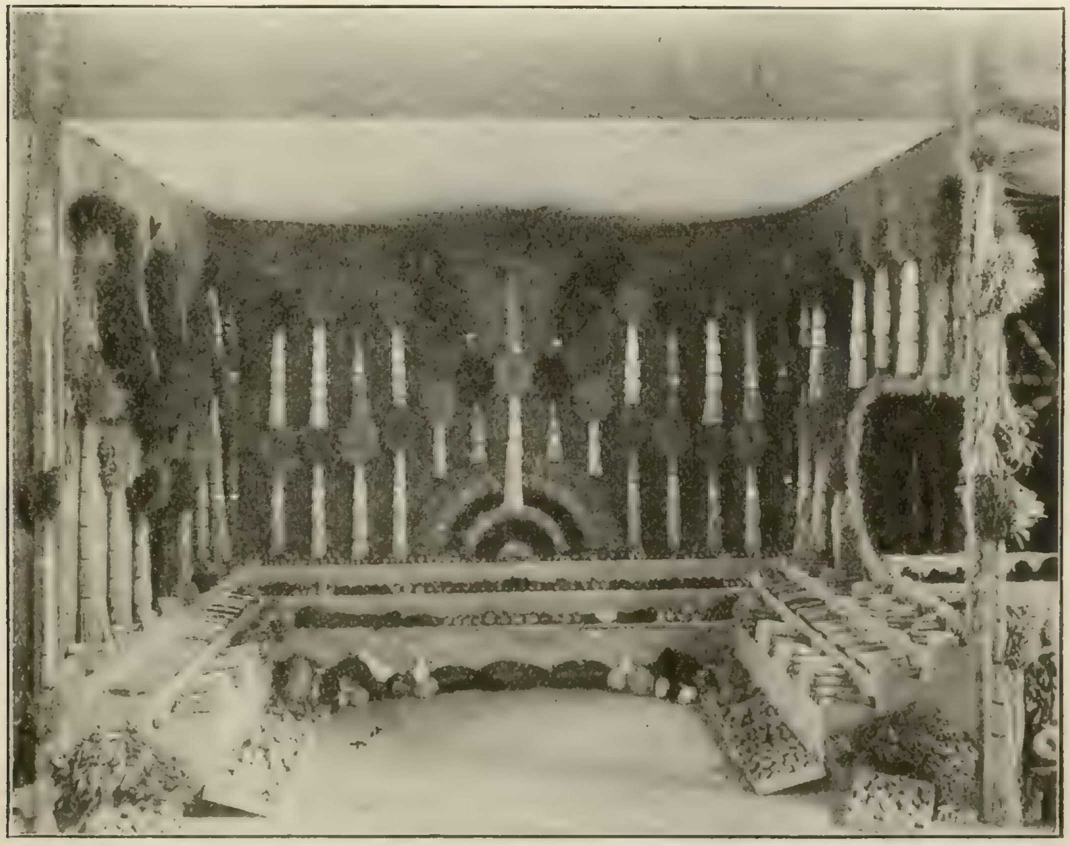
Ten Ears, White—First, W. J. Irving; second, L. Emanuel Peterson, Harcourt; third, J. W. Eral, Ft. Dodge; fourth, Victor E. Gustafson, Harcourt; fifth, E. B. Glenny; sixth, William Peterson, Gowrie; seventh, Fred G. Pinn, Humboldt; eighth, Axel T. Anderson.

Single Ear, Yellow—First, W. E. Brown; second, Willrich Jones; third, E. B. Glenny; fourth, L. Emanuel Peterson; fifth, Emory Gustafson; sixth, W. J. Irving.

Single Ear, White—First, Fred G. Pinn; second, W. J. Irving; third, C. R McClean; fourth, E. B. Glenny; fifth, J. W. Eral; sixth, L. Emanuel Peterson

SOUTH CENTRAL DISTRICT.

Ten Ears, Yellow—First, Erle F. Zeller, Jefferson; second, I. E. Proudfit, Altoona; third, Will Stenwyk, Mitchellville; fourth, J. S. Peters, Altoona; fifth, Marion Coppock, Altoona; sixth, Mat Baker, Mitchellville; seventh. E. L. Pearson, Mitchellville; eighth, C. G. Seiberling, Mitchellville; ninth. W. F. Otcheck, Grinnell; tenth, John Justice, Ankeny.



KEOKUK COUNTY BOOTH
First Prize County Exhibit, 1919 State Fair.

Ten Ears, White—First, Carl Holden, Williamsburg; second, W. F. Otcheck; third, Erle F. Zeller; fourth, Erle Knapp, Guthrie Center; fifth, W. O. Knapp, Guthrie Center; sixth, John Justice; seventh, Ivan Hummer, Iowa City; eighth, L. L. Bantall, Adel; ninth, William Danner, Dallas Center; tenth, W. F. Sims, Ames.

Single Ear, Yellow—First, Marion Coppock; second, Harry Groves, Williamsburg; third, John Justice; fourth, F. J. Horning, Altoona; fifth, Ben

McClanahan, Mitchellville; sixth, I. E. Proudfit; seventh Carl Holden; eighth, Hildebrand Bros., Gladbrook; ninth, Roy E. Proudfit, Adelphi; tenth, Clarence Pearson, Mitchellville.

Single Ear, White—First, W. F. Otcheck; second, Carl Holden; third, William Danner; fourth, John Justice; fifth, Earl Knapp; sixth, Paul Kern, Dallas Center; seventh, Erle F. Zeller; eighth, W. O. Knapp.

SOUTHERN DISTRICT.

Ten Ears, Yellow—First, J. G. McCray, Wayland; second, Ray Redfern, Yarmouth; third, Krizer Bros., Eddyville; fourth, Ellsworth Bailey, Ottumwa; fifth, N. H. Krizer, Rose Hill; sixth, Walter Reynolds, Rose Hill; seventh, J. A. Mason, Carlisle; eighth, J. U. Walker, Swan; ninth, Amos Bailey, Ottumwa; tenth, E. W. Bruns, Sigourney.

Ten Ears, White—First, W. W. Ettleman, Percieval; second, Otto H. Nau, Hillsboro; third, Amos Bailey; fourth, Krizer Bros.; fifth, Walter Reynolds; sixth, Ellsworth Bailey; seventh, N. H. Krizer; eighth, Walter Russell, Indianola; ninth, F. L. Reinhard & Son, Ottumwa; tenth, Octavia Williams, Pleasantville.

Single Ear, Yellow—First, J. A. Mason; second, Ray Redfern; third, Amos Bailey; fourth, J. M. Maxwell, Crawfordsville; fifth, Otto H. Nau; sixth, Walter Reynolds; seventh, T. E. Ward, Dallas; eighth, Krizer Bros.; ninth, N. H. Krizer; tenth, Ellsworth Bailey.

Single Ear, White—First, Ellsworth Bailey; second, Otto H. Nau; third, N. H. Krizer; fourth, Krizer Bros.; fifth, Amos Bailey; sixth, Walter Reynolds; seventh, Walter Russell; eighth, W. W. Ettleman.

NORTHERN AND NORTH CENTRAL DISTRICTS.

Ten Ears Other Than Yellow or White—First, Fred G. Pinn; second, E. B. Glenny; third, P. M. Peterson, Cherokee; fourth, W. J. Irving; fifth, C. R. McClean.

Single Ear Other Than Yellow or White—First, L. Emanuel Peterson; second, C. R. McClean; third, E. B. Glenny; fourth, W. J. Irving; fifth, P. M. Peterson.

SOUTH CENTRAL AND SOUTHERN DISTRICTS.

Ten Ears Other Than Yellow or White—First, W. F. Otcheck; second, G. W. Coon, Hartford; third, Ivan Hummer; fourth, Guy Coon, Hartford; fifth, P. M. Parsons, Carlisle.

Single Ear Other Than Yellow or White—First, Guy Coon; second, Ellsworth Bailey; third, W. F. Otcheck; fourth, Mat Baker; fifth, W. A. Middleswart, Indianola.

SWEEPSTAKES.

Ten Ears, Yellow—J. G. McCray.

Ten Ears, White—Carl Holden.

Ten Ears Other Than Yellow or White—W. F. Otcheck.

Single Ear, Yellow—Marion Coppock.

Single Ear, White—Ellsworth Bailey.

Single Ear Other Than Yellow or White—Guy Coon.

GRAND SWEEPSTAKES.

Ten Ears, Any Variety—J. G. McCray.

Single Ear, Any Variety—Marion Coppock.

SWEET CORN AND POP CORN.

Ten Ears Small Early Sweet Corn—first, Clark Bros., Albia; second, J. L. Todd, Des Moines; third, J. E. Cornwell, Ankeny; fourth, C. E. Malone, Atlantic; fifth, H. P. Cornwell, Ankeny.

Ten Ears Late Sweet Corn—Second, J. L. Todd; third, Mate Baker, fourth, Clark Bros.

Ten Ears Evergreen, Roasting Ears For Table Use In Husks—First, Charles Pink, Des Moines; second, W. F. Otcheck; third, J. Brice, Pleasantville; fourth, J. U. Walker.

Ten Ears Country Gentlemen, Roasting Ears For Table Use In Husks—First, Elmer Reed, Ames; second, Gale W. Reed, Ames; third, C. C. McGrew, Des Moines.

Ten Ears White Rice Pop Corn—First, Ray Redfern; second, J. L. Todd; third, W. F. Otcheck; fourth, Edward R. Maudsley; fifth, Clark Bros.

Ten Ears Any Other Variety Pop Corn—First, J. C. Eggert, Newton; second, L. P. Scholsser, Colfax; third, J. L. Todd; fourth, Clark Bros.; fifth, C. C. McGrew.

GRAINS AND SEEDS.

Winter Wheat—First, Carl Holden; second, Clarence Pearson; third, Mate Baker; fourth, J. A. Mason; fifth, J. W. Freel, Pleasantville; sixth, A. W. Taylor, Pleasantville.

Spring Wheat—First, John Frush, Pleasantville; second, W. F. Otcheck; third, J. W. Freel; fourth, Ray Redfern; fifth, Carl Holden; sixth, Paul Peters, Ankeny.

Small Early Oats—First, Harry Groves; second, Otto H. Nau; third, W. J. Irving; fourth, Erle F. Zeller; fifth, A. W. Hitchcock, Ankeny; sixth, Ray Redfern.

Swedish Type Oats—First, S. A. Sexauer; second, W. F. Otcheck; third, W. J. Irving; fourth, Harry Groves; fifth, L. Emanuel Peterson; sixth, Mate Baker.

Silver Mine Type Oats—First, Ray Redfern; second, Mate Baker; third, Virgil Buchmiller, Jefferson; fourth, Paul Peters; fifth, C. E. Bauer, Mitchellville; sixth, A. B. Curry, Runnells.

Large Colored Oats—First, W. F. Otcheck; second, D. W. Bruns; third, H. F. Osterland; fourth, J. T. Wasson, Panora.

Rye—First, J. W. Freel; second, Ray Redfern; third, W. F. Otcheck; fourth, Erle F. Zeller.

Barley—First, Otto H. Nau; second, W. F. Otcheck; third, J. W. Freel; fourth, J. A. Mason; fifth, J. T. Wasson.

Speltz—First, J. T. Wasson; second, C. E. Malone.

Buckwheat—First, Ed. Stuart, Adelphi; second, J. T. Hall, Ankeny; third, Clyde L. Stuart, Adelphi.

Timothy Seed—First, C. E. Malone; second, Carl Holden; third, Ray Redfern; fourth, W. F. Otcheck; fifth, W. O. Knapp.

Red Clover Seed—First, Carl Holden; second, George Koch, Brighton; third, J. H. Burgy, South Amana; fourth, Edwin Ballou, Panora; fifth, Carrol Peters.

Millet Seed—First, W. F. Otcheck; second, M. F. Sims; third, J. T. Wasson.

Flax Seed—First, Ed. Stuart; second, J. A. Mason; third, C. E. Malone.

GRASS AND FORAGE.

Timothy Sheaf (Hay)—First, Ray Redfern; second, J. T. Wasson; third, J. E. Cornwell; fourth, F. L. Reinard and Son; fifth, Reinard and Orman, Ottumwa.

Red Top Sheaf (Hay)—First, F. L. Reinard & Son; second, J. T. Wasson; third, Carl Holden; fourth, J. E. Cornwell; fifth, W. F. Otcheck.

Medium Red Clover Sheaf (Hay)—First, J. W. Freel; second, C. E. Malone; third, Ray Redfern; fourth, F. L. Reinard & Son; fifth, J. T. Wasson.

Mammoth Red Clover Sheaf (Hay)—First, S. A. Shatterly, Hartford; second and third, F. L. Reinard & Son; fourth, Silvis Stamm, Orillia.

Alsike Clover Sheaf (Hay)—First, F. L. Reinard & Son; second, J. T. Wasson; fourth, John Justice; fifth, C. E. Malone.

Millet Sheaf (Hay)—First, Reinard & Orman; second, F. L. Reinard & Son; third, W. F. Otcheck; fourth, C. E. Malone; fifth, J. T. Wasson.

Blue Grass Sheaf (Hay)—First, S. A. Shatterly; second, W. F. Otcheck; third, F. L. Reinard & Son; fourth, J. T. Wasson; fifth, C. E. Malone.

Sudan Grass Sheaf (Hay)—First, J. W. Freel; second, J. T. Wasson; third, S. D. Whinery, Des Moines; fourth, C. E. Malone.

PLEASANT VIEW FARM BOOTH
First Prize Individual Farm Exhibit, 1919 State Fair.

SHEAF GRAIN.

Wheat in Straw (Spring)—First, W. F. Otcheck; second, J. A. Mason; third, M. F. Sims; fourth, J. T. Wasson.

Wheat in Straw (Winter)—First, W. F. Otcheck; second, John Frush; third, J. T. Wasson; fourth, F. L. Reinard & Son; fifth, S. A. Shatterly.

Barley in Straw—First, W. F. Otcheck; second, J. W. Freel; third, F. L. Reinard & Son; fourth, C. E. Malone; fifth, J. E. Cornwell.

Oats in Straw (Early)—First, W. F. Otcheck; second, Carl Holden; third, C. E. Malone; fourth, J. T. Wasson.

Oats in Straw (Late)—First, W. F. Otcheck; second, J. E. Cornwell.

Rye in Straw—First, C. E. Malone; second, W. F. Otcheck; third, J. T. Wasson; fourth, Charles Pink; fifth, F. L. Reinard & Son.

Flax for Seed—First, E. M. Wilson, Panora; second, J. T. Wasson; third, W. F. Otcheck; fourth, C. E. Malone; fifth, Ray Redfern.

Ripe Millet for Seed—First, E. M. Wilson; second, F. L. Reinard & Son; third, J. T. Wasson; fourth, J. W. Freel; fifth, M. F. Sims.

Speltz—First, W. F. Otcheck; second, J. T. Wasson; third, J. E. Cornwell.

Timothy Sheaf (for Seed)—First, F. L. Reinard & Son; second, Ray Redfern; third, Reinard & Orman; fourth, W. F. Otcheck; fifth, J. A. Mason.

Blue Grass Sheaf (Seed)—First, F. L. Reinard & Son; second, W. F. Otcheck; third, Ray Redfern; fourth, J. T. Wasson; fifth, S. A. Shatterly.

Sudan Grass Sheaf (Seed)—First, J. W. Freel; second, S. D. Whinnery; third, C. E. Malone.

POTATOES.

Early Varieties.

Early Ohio—First, W. E. Utterback, Sigourney; second, James Heathershaw, Des Moines; third, L. Emanuel Peterson; fourth, Charles Pink; fifth. Gale W. Reed; sixth, G. W. King & Son, Des Moines.

Bliss Triumph—First, Sestier Bros., Des Moines; second, W. F. Otcheck; third, Elmer Reed; fourth, Charles Pink.

Beauty of Hebron—First, Sestier Bros.; second, Charles Pink.

Sweepstakes.

Early Variety—Sestier Bros.

Mid-season.

Irish Cobbler—First, W. E. Utterback; third, Sestier Bros.; fourth, Charles Pink; fifth, A. L. Plummer, Des Moines; sixth, James Heathershaw.

Maggie Murphy—First, W. E. Utterback; second, Charles Pink; third, W. F. Otcheck; fourth, A. L. Plummer; fifth, Sestier Bros.; sixth, Elmer Reed.

Blue Victor—First, W. E. Utterback; second, Sestier Bros.; third, J .T. Wasson.

Sweepstakes.

Mid-season Varieties—First, W. E. Utterback.

Late.

Bonanza—First, W. E. Utterback; second, Sestier Bros.; third, W. F. Otcheck.

Rural New Yorker—First, W. E. Utterback; second, W. F. Otcheck; third, Sestier Bros.; fourth, James Heathershaw.

Seneca Beauty—First, W. E. Utterback; second, Sestier Bros.; third, James Heathershaw; fourth, Elmer Reed.

Sweepstakes.

Late Varieties—W. E. Utterback.

Miscellaneous.

Collection to Consist of at Least Ten Varieties—First, W. E. Utterback; second, Sestier Bros.; third, Charles Pink.

Any Meritorious Variety Not Listed Above, Limited to Ten Varieties—First, W. E. Utterback; first, Elmer Read; first, James Heathershaw.

Sweepstakes.

Miscellaneous Varieties—W. E. Utterback.

Grand Sweepstakes.

Limited to Sweepstakes Winners in Four Divisions—W. E. Utterback.

SWEET POTATOES.

Red Jersey—First, Ed Stuart; second, Sestier Bros.

Yellow Jersey—First, Fred Heathershaw; second, Sestier Bros.; third, Ed Stuart.

White—First, James Heathershaw; second, Gale W. Reed; third, Elmer Reed.

Any Meritorious Variety Not Listed Above—First, Fred Heathershaw; second, J. U. Walker.

Red Bermudas—First, Fred Heathershaw.

Nancy Hall—First, Fred Heathershaw

FIELD OR STOCK VEGETABLES.

Beets, White Half Sugar, Three Specimens—First, Fred Heathershaw; second, Charles Pink; third, A L. Plummer.

Beets, Mangel-wurtzels, Three Specimens—First, Fred Heathershaw; second, Charles Pink; third, Clarenz Holehan, Des Moines.

Beets, Golden Tankard, Three Specimens—First, James Heathershaw; second, Sestier Bros.; third, Charles Pink.

White Carrots for Stock, Six Specimens—First, Fred Heathershaw; second, Charles Pink; third, A. L. Plummer.

Pumpkins, Ripe Field, Two Specimens—First, I. E. Proudfit, Altoona; second, A. L. Plummer; third, James Heathersshaw.

Rutabagoes for Stock, Any Variety, Six Specimens—First, Sestier Bros.; second, A. L. Plummer; third, James Heathershaw.

Squash for Stock, Two Specimens—First, C. W. Packer, Altoona; second, Cyrus E. Harvey; third, G. W. King & Son.

Turnips for Stock, Six Specimens—First, Sestier Bros.; second, James Heathershaw; third, Elmer Reed.

Largest Pumpkin—First, I. E. Proudfit; second, A. L. Plummer; third, J. U. Walker.

Largest Squash—First, C. W. Packer; second, Sestier Bros.; third, R. T. Packer, Adelphi.

Largest White Carrots—First, A. L. Plummer; second, James Heathershaw; third, Charles Pink.

Largest Beet, Mangel-wurzel—First, James Heathershaw; second, Charles Pink; third, A. L. Plummer.

Largest Turnip—First, Elmer Reed; second, J. U. Walker.

Largest Rutabago—First, Sestier Bros.; second, A. L. Plummer; third, James Heathershaw.

VEGETABLE ROOT CROP.

Red Globe Onions, One Dozen—First, Sestier Bros.; second, John Frush; third, A. L. Plummer.

White Globe Onions, One Dozen—First, Sestier Bros.; second, John Frush; third, James Heathershaw.

Yellow Globe Onions—First, John Frush; second, A. L. Plummer; third, E W. Freel, Pleasantville.

Twelve Largest Onions, Any Variety—First, John Frush; second, Charles Pink; third, Cyrus E. Harvey, Altoona.

Best One Dozen Onions, Not Named Above—First, John Frush; second, Sestier Bros.; third, E. W. Freel.

Turnips, One-half Dozen—First, Arthur Wright, Des Moines; second, J. L. Todd; third, James Heathershaw.

Rutabago Turnips, One-half Dozen, Yellow Flesh—First, Charles Pink. second, James Heathershaw; third, Elmer Reed.

Parsnips, One-half Dozen—First, A. L. Plummer; second, J. L. Todd; third, James Heathershaw.

Carrots for Table Use, One-half Dozen—First, Murphy McMurphy; second, E. W. Freel; third, Arthur Wright.

Commercial Sugar Beets—First, E. W. Freel; second, Sestier Bros.; third, A. L. Plummer.

Beets for Table Use, One-fourth Dozen—First, Murphy McMurphy; second, G. W. King & Son; third, J. U. Walker.

Vegetable Oysters, One-half Dozen—First, Cyrus E. Harvey; second, Sestier Bros.; third, James Heathershaw.

TABLE VEGETABLES.

One Quart Shelled Ground Cherries—First, Cyrus E. Harvey; second, James Heathershaw; third, W. F. Otcheck.

Beans, Pole Lima, Shelled One Quart—First, Cyrus E. Harvey; second, James Heathershaw; third, Sestier Bros.

Beans, Henderson's Bush Lima, Shelled One Quart—First, C. C. McGrew. Des Moines; second, A. L. Plummer; third, Clyde L. Stuart.

Beans, White Navy, Shelled One Quart—First, A. C. Adamson, Ankeny; second, Mrs. Ella Plummer, Des Moines; third, M. F. Sims.

Cabbage, Early Jersey Wakefield, Three Heads—First, Charles Pink; second, John Frush; third, James Heathershaw.

Cabbage, Late Flat, Three Heads—First, James Heathershaw. second, Sestier Bros.; third, Charles Pink.

Cabbage, Red, Three Heads—First, Cyrus E. Harvey; second, Sestier Bros.; third, James Heathershaw.

Cabbage, Savoy, Three Heads—First, James Heathershaw; second, Charles Pink; third, John Frush.

Cabbage, Three Heaviest Heads—First, James Heathershaw; second, Charles Pink; third, Cyrus E. Harvey.

Cabbage, Round, Any Variety, Three Heads—First, Sestier Bros.; second, James Heathershaw; third, John Frush.

Cauliflower, Three Heads—First, Sestier Bros.; second, James Heathershaw.

Cucumbers, Ripe, Three Specimens—First, James Heathershaw; second, Charles Pink; third, Sestier Bros.

Cucumbers for Slicing, Six Specimens—First, J. L. Todd; second, Mrs. I. G. Williams, Des Moines; third, James Heathershaw.

Celery, Red, Roots Attached, Six Stalks—First, Sestier Bros.

Celery, White, Roots Attached, Six Stalks—First, Sestier Bros.

Egg Plants, Three Specimens—First, Sestier Bros.; second, James Heathershaw; third, Charles Pink.

Kohl Rabbi, Three Heads—First, James Heathershaw; second, L. P. Schlosser; third, Cyrus E. Harvey.

Musk Melons, Green Fleshed, Three Specimens—First, Sestier Bros.; second, Charles Pink; third, J L. Todd.

Musk Melons, Salmon Fleshed, Three Specimens—First; W. A. Pickering, Des Moines; second, C. A. Swan, Grimes; third, Cyrus E. Harvey.

Peppers, Green Mango, Twelve Specimens—First, Cyrus E. Harvey; second, Sestier Bros.; third, James Heathershaw.

Peppers, Red Mango, Twelve Specimens—First, Sestier Bros.; second, Cyrus E. Harvey; third, Charles Pink.

Peppers, Red, Twelve Specimens—First, Cyrus E. Harvey; second, J. L Todd; third, Sestier Bros.

Peppers, Red Cayenne, Twelve Specimens—First, J. L. Todd; second, Cyrus E. Harvey; third, James Heathershaw.

Pumpkin, Ripe Sweet, Two Specimens—First, James Heathershaw; second, J. A. Mason; third, Sestier Bros.

Rhubarb for Table Use, Six Stalks—First, Sestier Bros.; second, S. D. Whinnery; third, Cyrus E. Harvey.

Squash, Banana, Two Specimens—First, Cyrus E. Harvey.

Squash, Boston Marrow, Two Specimens—First, Sestier Bros.; second, J. A. Mason; third, James Heathershaw.

Squash, Crook Neck, Two Specimens—First, J. E. Cornwell; second, James Heathershaw; third, Cyrus E. Harvey.

Squash, Delicious, Two Specimens—First, James Heathershaw; second, Sestier Bros.

Squash, Essex Hybrid, Two Specimens—First, Sestier Bros.; second, James Heathershaw; third, Charles Pink.

Squash, Hubbard, Two Specimens—First, Sestier Bros.; second, James Heathershaw; third, J. A. Mason.

Squash, Marble Head, Two Specimens—First, Sestier Bros.; second, Cyrus E. Harvey; third, James Heathershaw.

Table Queen or Danish, Two Specimens—First, Charles Pink; second. Clyde L. Stuart; third, James Heathershaw.

Squash, Sibbley, Two Specimens—First, Charles Pink; second, Cyrus E. Harvey; third, James Heathershaw.

Tomatoes, Red, Twelve Specimens—First, Cyrus E. Harvey; second, Charles Pink; third, Mrs. I. G. Williams.

Tomatoes, Purple—First, Mrs. Ella Plummer; second, Cyrus E. Harvey; third, Charles Pink.

Tomatoes, Yellow, Twelve Specimens—First, Cyrus E. Harvey; second, Charles Pink; third, James Heathershaw.

Tomatoes, Largest, Any Variety, Twelve Specimens—First, G. W. King & Son; second, Charles Pink; third, J. L. Todd.

Watermelons, Two Specimens—First, Roy Longfellow, Blockton; second, Cyrus E. Harvey; third, Sestier Bros.

DISPLAYS.

Display of Onions, Not Less Than Five Varieties of Five Specimens Each —First, Sestier Bros.; second, J. A. Mason; third, James Heathershaw.

Tomatoes, Five Varieties, Five Specimens Each—First, Charles Pink; second, Sestier Bros; third, James Heathershaw.

Peppers, Not Less Than Five Varieties of Five Specimens Each—First, Sestier Bros.; second, James Heathershaw; third, Cyrus E. Harvey.

VEGETABLES SWEEPSTAKES.

Sweepstakes—First, Sestier Bros.; second, James Heathershaw; third, W. E. Utterback; fourth, Cyrus E. Harvey; fifth, Charles Pink.

INDIVIDUAL FARM EXHIBITS.

South Central District—First, E. M. Wilson; second, J. T. Wasson.

Southern District—First, J. W. Freel; second, F. L. Reinard & Son; third, J. A. Mason; fourth, C. E. Malone; fifth, J. U. Walker; sixth, W. F. Lyon, Pleasantville.

Polk County—First, Charles O. Garrett, Des Moines; second, O. A. Decker, Adelphi; third, John Justice; fourth, J. E. Cornwell.

SWEEPSTAKES.

Highest Scoring Individual Farm Exhibits—First, J. W. Freel; second, F. L. Reinard & Son; third, J. A. Mason; fourth, E. M. Wilson.

COUNTY EXHIBITS.

Northern District—First, Winnebago County; second, Clay County.

North Central District—First, Grundy County.

South Central District—First, Guthrie County; second, Polk County; third, Greene County; fourth, Carroll County; fifth, Dallas County.

Southern District—First, Keokuk County; second, Cass County; third, Warren County; fourth, Marion County; fifth, Washington County.

SWEEPSTAKES.

Highest Scoring County Exhibit—First, Keokuk County; second, Guthrie County; third, Cass County; fourth, Polk County.

Most Attractive, Best Decorated and Best Arranged Exhibit—First, Guthrie County; second, Cass County; third, Polk County; fourth, Keokuk County; fifth, Winnebago County.

PANTRY DEPARTMENT

SUPERINTENDENT............................H. O. WEAVER, Wapello.

BREAD, ETC.

JUDGES.. { MRS. J. K. BARLOW.
E. W. ATKINS.

Loaf Yeast Bread—First, Mrs. W. C. Raney, Des Moines; second, Mrs. C. F. Spring, Des Moines; third, Mrs. Fred G. Mote, Des Moines; fourth, Mrs. F. H. Sinclair, Des Moines; fifth, Mrs. M. R. Kellman, Des Moines.

Loaf Salt Rising Bread—First, Mrs. F. H. Menzel, McCallsburg; second, Mrs. Cyrus E. Harvey, Altoona; third, Mrs. M. Martin, Des Moines; fourth, Mrs. S. I. Stocker, Des Moines.

Loaf Graham Bread—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. Frank Huston, Waukee; third, Mrs. F. H. Sinclair, Des Moines; fourth, Mrs. James Grinstead, Mitchellville; fifth, Mrs. H. A. Cornwell, Ankeny.

Loaf Nut Bread—First, Mrs. A. H. Ketchum, Des Moines; second, Mrs. J. A. Peters, Ankeny; third, Odessa P. Llewellyn, Waukee; fourth, Mrs. A. Bongers, Des Moines; fifth, Mrs. E. Van Horn, Altoona.

Loaf Entire Wheat Bread—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. F. H. Sinclair, Des Moines; third, Mrs. J. A. Peters, Ankeny; fourth, E. L. Thompson, Des Moines; fifth, Mrs. S. I. Stocker, Des Moines.

Pan of Rolls—First, Mrs. F. H. Sinclair, Des Moines; second, Mrs. W. C. Raney, Des Moines; third, Mrs. Fern Bishop, Mitchellville; fourth, Mrs. J. A. Peters, Ankeny; fifth, T. J. Flora, Des Moines.

Loaf Rye Bread—First, Mrs. E. M. Sinclair, Des Moines; second, Mrs. F. H. Sinclair, Des Moines; third, Mrs. J. A. Peters, Ankeny.

Loaf Corn Bread—First, Eva Baird, Des Moines; second, Mrs. James Grinstead, Mitchellville; third, Inez Stuart, Adelphi; fourth, Mrs. Frank Huston, Waukee; fifth, Grace Henry, Runnells.

CAKES.

Fruit—First, E. L. Thompson, Des Moines; second, Mrs. James Grinstead, Mitchellville; third, Anna Grinstead, Mitchellville.

Pound—First, Mrs. Jesse Alexander, Indianola; second, Anna B. Frost, Des Moines.

Sponge—First, T. J. Flora, Des Moines; second, Eva Baird, Des Moines; third, Anna B. Frost, Des Moines.

Watermelon—First, Mrs. Jesse Alexander, Indianola; second, Mrs. F. M. Person, Adelphi; third, Mrs. Anna Gammon, Valley Junction.

Coffee—First, T. J. Flora, Des Moines; second, Anna B. Frost, Des Moines.

Marble—First, Mrs. Jesse Alexander, Indianola; second, Anna B. Frost, Des Moines; third, Mrs. F. M. Person, Adelphi.

Angel Food—First, S. O. Jaques, Altoona; second, Mrs. Ella Plummer, Des Moines; third, Ethel B. Baird, Des Moines.

Sunshine—First, Mrs. C. W. Britton. Altoona; second, Ethel B. Baird, Des Moines; third, Mrs. F. H. Menzel, McCallsburg.

Fairy Loaf—First, Mrs. F. M. Person, Adelphi; second, Mrs. Jesse Alexander, Indianola; third, Ethel B. Baird, Des Moines.

Bride's—First, Mrs. Jesse Alexander, Indianola; second, Mrs. F. M. Person, Adelphi; third, Mrs. Frank Huston, Waukee.

Nut Loaf (White)—First, Mrs. F. M. Person, Adelphi; second, Mrs. Jesse Alexander, Indianola; third, Mrs. Conn Andrews, Newton.

Devil's Food—First, Elizabeth Wharton, Des Moines; second, Mrs. Jesse Alexander, Indianola; third, Ethel B. Baird, Des Moines.

White Citron—First, Mrs. F. M. Person, Adelphi; second, Mrs. Jesse Alexander, Indianola; third, Anna B. Frost, Des Moines.

Cocoanut Loaf—First, Mrs. Jesse Alexander, Indianola; second, Mrs. F. M. Person, Adelphi; third, Mrs. A. H. Ketchum, Des Moines.

Currant Loaf—First, Mrs. Jesse Alexander, Indianola; second, Mrs. Frank Huston, Waukee.

Election Loaf—First, Mrs. E. M. Sinclair, Des Moines; second, Anna B. Frost, Des Moines; third, T. J. Flora, Des Moines.

White Fruit—First, Mrs. F. M. Person, Adelphi; second, Mrs. Jesse Alexander, Indianola; third, Anna Grinstead, Mitchellville.

Gold Cake—First, Mrs. F. M. Person, Adelphi; second, Mrs. Jesse Alexander, Indianola; third, Mrs. S. I. Stocker, Des Moines.

Jam Cake—First, Mrs. F. M. Person, Adelphi; second, Anna B. Frost, Des Moines; third, Mrs. Jesse Alexander, Indianola.

LAYER CAKE.

Almond—First, Mrs. Frank Huston, Waukee; second, Mrs. James Grinstead, Mitchellville.

Banana—First, Mrs. Jesse Alexander, Indianola; second, E. Hydon, Mitchellville.

Caramel (or Burnt Sugar)—First, Mrs. Chas. Walter, Altoona; third, Mrs. F. M. Person, Adelphi.

White (Carmel Frosting)—First, Mrs. Frank Huston, Waukee; second, Inez Stuart, Adelphi; third, Mrs. Jesse Alexander, Indianola.

Chocolate (White Frosting)—First, Sadie E. Elliott, Mitchellville; second, Mrs. Frank Huston, Waukee; third, Ferne Botsford, Des Moines.

Chocolate (Chocolate Frosting)—First, Mrs. Frank Huston, Waukee; third, Anna B. Frost, Des Moines.

Cocoanut—First, Mrs. C. W. Britton, Altoona; second, Eva Baird, Des Moines; third, Mrs. Frank Huston, Waukee.

Fig (White Layer)—First, Mrs. S. I. Stocker, Des Moines; second, Mrs. Jesse Alexander, Indianola; third, Anna B. Frost, Des Moines.

Fig (Dark Layer)—First, Mrs. Jesse Alexander, Indianola; second, E. Hydon, Mitchellville; third, Mrs. Fred M. Webster, Runnells.

Jelly—First, Anna B. Frost, Des Moines.

Jelly (Roll)—First, Eva Baird, Des Moines; second, Mrs. Jesse Alexander, Indianola.

Lemon Jelly—First, Anna B. Frost, Des Moines; second, Mrs. Anna Gammon, Valley Junction.

Maple—First, Mrs. Frank Huston, Waukee; second, Anna B. Frost, Des Moines; third, Mrs. Jesse Alexander, Indianola.

Marshmallow—First, Mrs. Jesse Alexander, Indianola; second, Mrs. F. M. Person, Adelphi; third, Anna B. Frost, Des Moines.

English Walnut (White)—First, Mrs. C. W. Britton, Altoona; second, Mrs. Jesse Alexander, Indianola; third, Mrs. Frank Huston, Waukee.

Nut (Spice)—First, Mrs. F. M. Person; second, Mrs. Wilfrid Granquist, Des Moines.

Orange—First, Mrs. M. Martin; second, Mrs. S. I. Stocker.

Pineapple—First, Mrs. S. I. Stocker; second, Mrs. C. W. Britton.

Ribbon—First, Mrs. Frank Huston; second, Mrs. F. M. Person; third, Anna B. Frost.

White (White Frosting)—First, Mrs. Jesse Alexander; second, Jennie Wassen, Des Moines; third, Mrs. Leonard Gaston, Des Monies.

COOKIES, ETC.

One Dozen Sugar—First, Mrs. E. M. Sinclair; second, Mrs. M. R. Kellman.

One Dozen Cocoanut—First, Mrs. E. M. Sinclair; second, Ethel B. Baird.

One Dozen Fruit—First, Ethel B. Baird; second, Mrs. Chas. Walter.

One Dozen Nut—First, Mrs. Robt. W. Trowbridge, Des Moines; second, Mrs. F. H. Sinclair.

One Dozen Chocolate—First, Mrs. F. H. Sinclair; second, Mrs. E. M. Sinclair.

One Dozen Ginger—Second, Mrs. F. H. Menzel.

One Dozen Macaroons—First, Ethel B. Baird; second, Mrs. E. M. Sinclair.

One Dozen Raised Doughnuts—First, Mrs. Cyrus E. Harvey; second, Mrs. E. M. Sinclair.

One Dozen Baking Powder Doughnuts—First, O. W. Ellis, Altoona; second, Louise Hartung, Berwick.

Loaf Hard Gingerbread—Second, Georgia Cassatt, Waukee.

Loaf Soft Gingerbread—First, Mrs. F. M. Person; second, Mrs. G. W. Parsons, Carlisle.

One Dozen Lady Fingers—First, Mrs. E. M. Sinclair.

One Dozen Almond Wafers—First, Ethel B. Baird; second, E. L. Thompson.

Basket Fancy Cakes or Cookies—First, Miss J. Collins, Bondurant; second Mrs. S. I. Stocker.

HOMEMADE CANDY.

Plate French Cream—First, R. Thompson, Des Moines; second, E. L. Thompson; third, Miss J. Collins.

Plate Chocolate Fudge—First, Mrs. Chas. Walter; second, Mrs. C. C. McGrew, Des Moines; third, Esther B. Trowbridge, Des Moines.

Plate Chocolate Creams—First, Mrs. Chas. Walter; second, Miss J. Collins; third, Mrs. Fred Hethershaw, Des Moines.

Plate Divinity Creams—First, Mrs. Chas. Walter; second, Mrs. C. W. Britton; third, Mrs. Asa Lee, Mitchellville.

Plate Taffy—First, Mrs. Frank Dean, Altoona; second, Mrs. Fred Hethershaw; third, Miss J. Collins.

Plate Butterscotch—First, Mrs. Robt. W Trowbridge; second, Agnes Ellis, Adelphi; third, Miss J .Collins.

CONSERVES.

Currant—First, Hazel Plummer, Des Moines; second, Mrs. Ella Plummer.

Cherry—First, E. L. Thompson; second, Hazel Plummer.

Gooseberry—First, Hazel Plummer; second, Mrs. C. C. McGrew.

Strawberry—First, Mrs. Ella Plummer; second, Mrs. J. M. Henderson, Des Moines.

Peach—First, Hazel Plummer; second, Mrs. Ella Plummer.

Rhubarb—First, Anna Grinstead; second, Hazel Plummer.

Orange Marmalade—First, Mrs. L. H. Curran, Des Moines; second, Mrs. C. C. McGrew.

SUN PRESERVED FRUIT.

Strawberry Sunshine—First, Mrs. Conn Andrew; second, Mrs. J. M. Henderson.

Red Raspberry Sunshine—First, Mrs. Ella Plummer; second, Hazel Plummer.

Cherry Sunshine—First, Hazel Plummer; second, Mrs. J. M. Henderson.

Peach Sunshine—First, E. L. Thompson; second, Hazel Plummer.

PRESERVES.

Apple—First, Mrs. L. H. Curran; second, Mrs. Ella Plummer.

Apricot—First, E. L. Thompson; second, Mrs. Anna Gammon.

Cherry—First, Mrs. Ella Plummer; second, Mrs. J. M. Henderson.

Crabapple—First, Mrs. C. C. McGrew; second, Mrs. Anna Green, Beech.

Currant—First, Mrs. E. M. Sinclair; second, Hazel Plummer.

Citron—First, R. Thompson; second, E. L. Thompson.

Cranberry—First, R. Thompson; second, E. L. Thompson.

Blackberry—First, Anna Grinstead; second, Mrs. Ella Plummer.

Gooseberry—First, Mrs. C. J. Cummins, Des Moines; second, Mrs. L. H. Curran.

Black Raspberry—First, Anna Grinstead; second, Hazel Plummer.

Strawberry—First, Mrs. J. M. Henderson; second, Mrs. A. R. Henderson, Des Moines.

Peach—First, Mrs. C. C. McGrew; second, Mrs. M. Kastberg, Dse Moines.

Pear—First, Mrs. C. C. McGrew; second, Mrs. M. Kastberg, Des Moines.

Plum—First, Mrs. C. C. McGrew; second, Mrs. Ella Plummer.

Quince—First, Mrs. C. C. McGrew; second, R. Thopmson.

Tomato—First, Mrs. L. H. Curran; second, Mrs. James Grinstead.

Watermelon—First, Mrs. Anna Grinstead; second, R. Thompson.

Pineapple—First, Mrs. Ella Plummer; second, Hazel Plummer.

Red Raspberry—First, Mrs. Ella Plummer; second, Hazel Plummer.

JELLIES.

Apple—First, Mrs. M. Kastberg; second, Mrs. C. C. McGrew.

Black Raspberry—First, Mrs. Conn Andrew; second, Mrs. C. C. McGrew.

Blackberry—First, Mrs. C. C. McGrew; second, Alna Grinstead.

Crabapple—First, Mrs. C. C. McGrew; second, Mrs. S. W. Barrett, Mitchellville.

Cherry—First, Mrs. L. H. Curran; second, Maud Bierma, Altoona.

Currant (White)—First, Mrs. L. H. Curran; second, Mrs. Conn Andrew.

Currant (Red)—First, Mrs. Anna Gammon; second, Mrs. C. C. McGrew.

Cranberry—First, Mrs. M. Kastberg; second, Mrs. L. H. Curran.

Gooseberry—First, Mrs. W. W. Preston, Avon; second, Mrs. M. Kastberg.

Haw (Red)—First, Mrs. M. Kastberg; second, Mrs. Bert A. Brown, Des Moines.

Grape (Dark)—First, Mrs. L. H. Curran; second, Mrs. C. E. Stephenson, Eddyville.

Grape (White)—First, Mrs. L. H. Curran; second, Eunice Longworth, Polk.

Grape (Wild)—First, Mrs. M. Kastberg; second, Mrs. W. W. Preston.

Pineapple—First, Mrs. M. Kastberg; second, Mrs. C. C. McGrew.

Peach—First, Mrs. L. H. Curran; second, Mrs. M. Kastberg.

Pear—First, Mrs. L. H. Curran; second, Mrs. M. Kastberg.

Plum—First, Mrs. L. H. Curran; second, Mrs. C. C. McGrew.

Quince—First, Mrs. L. H. Curran; second, Mrs. C. C. McGrew.

Rhubarb—First, Mrs. L. H. Curran; second, Mrs. J. A. Peters.

Red Raspberry—First, Mrs. L. H. Curran; second, Mrs. J. A. Ridgeway, Runnells.

Strawberry—First, Agnes Ellis; second, Mrs. Wilfrid Granquist.

BUTTERS.

Apple—First, Anna Grinstead; second, Mrs. L. H. Curran.

Black Raspberry—First, Mrs. L. H. Curran; second, Anna Grinstead.

Cherry—First, Mrs. M. Kastberg; second, Anna Grinstead.

Crabapple—First, Mrs. W. W. Preston; second, Alna Grinstead.

Currant—First, Mrs. M. Kastberg; second, Mrs. L. H. Curran.

Gooseberry—First, Mrs. Anna Grinstead; second, Mrs. L H. Curran.

Grape (Tame)—First, Mrs. L. H. Curran; second, Mrs. Anna Gammon.

Grape (Wild)—First, Mrs. Frank Huston; second, Mrs. Anna Gammon.

Peach—First, Mrs. L. H. Curran; second, Mrs. M. Kastberg.

Plum—First, Mrs. L. H. Curran; second, Mrs. Wilfrid Granquist.

Pineapple—First, Mrs. L. H. Curran; second, Mrs. M. Kastberg.

Quince—First, Mrs. L. H. Curran; second, Mrs. M. Kastberg.

Red Raspberry—First, Mrs. Anna Gammon; second, Mrs. M. Kastberg.

Rhubarb—First, Mrs. L. H. Curran; second, Mrs. Anna Grinstead.

Strawberry—First, Mrs. L. H. Curran; second, Mrs. M. Kastberg.

JAMS.

Apple—First, Mrs. E. M. Sinclair; second, Mrs. M. Kastberg.

Black Raspberry—First, Mrs. J. E. Grant, Carlisle; second, Mrs. F. M. Person.

Cranberry—First, Mrs. M. Kastberg; second, E. L. Thompson.

Blackberry—First, Mrs. Wilfrid Granquist; second, R. Thompson.

Crabapple—First, Mrs. F. H. Sinclair; second, Mrs. Anna Grinstead.

Currant—First, Hazel Plummer; second, Mrs. Conn Andrew.

Gooseberry—First, Mrs. Ella Plummer; second, Mrs. J. E. Grant, Carlisle.

Pineapple—First, Mrs. L. H. Curran; second, Mrs. C. C. McGrew.

Peach—First, Mrs. Ella Plummer; second, Hazel Plummer.

Pear—First, Mrs. Ella Plummer; second, Alna Grinstead.

Plum—First, Mrs. Ella Plummer; second, Mrs. Anna Grinstead.

Strawberry—First, Mrs. M. Kastberg; second, Mrs. E. M. Sinclair.

Quince—First, E. L. Thompson; second, Mrs. L. H. Curran.

Tomato—First, Mrs. E. M. Sinclair; second, Mrs. L. H. Curran.

Tomato Fig—First, Mrs. L. H. Curran.

SOUR PICKLES—CATSUP AND VINEGAR.

Beet—First, Mrs. C. C. McGrew; second, Mrs. Anna Grinstead.

Bean—First, Mrs. J. V. Patrick, Des Moines; second, Mrs. M. Kastberg.

Cucumber—First, Mrs. J. V. Patrick; second, Mrs. C. C. McGrew.

Mango—First, E. L. Thompson.

Onion—First, Mrs. C. C. McGrew; second, Mrs. M. Kastberg.

Tomato—First, Mrs. L. H. Curran; second, Mrs. C. C. McGrew.

Mixed—First, Mrs. Anna Grinstead; second, Alna Grinstead.

Chow Chow—First, Mrs. Anna Grinstead; second, Alna Grinstead.

Piccalilli—First, Mrs. C. C. McGrew; second, Mrs. M. Kastberg.

Chili Sauce—First, Mrs. E. M. Sinclair; second, Mrs. C. C. McGrew.

Tomato Catsup—First, Mrs. Anna Grinstead; second, Mrs. E. M. Sinclair.

Cucumber Catsup—First, Mrs. Anna Grinstead.

Walnut Catsup—First, Mrs. M. Martin; second, Mrs. E. H. Pickering, Des Moines.

Home Made Cider Vinegar—First, Mrs. M. Kastberg; second, Mrs. Anna Grinstead.

CANNED FRUITS.

Apple—First, L. P. Schlosser, Colfax; second, Mrs. C. C. McGrew.

Apricot—First, Mrs. C. C. McGrew; second, Mrs. Anna Gammon.

Blackberries—First, Mrs. C. S. Stephenson; second, Alna Grinstead.

Cherries—First, Mrs. C. C. McGrew; second, Hazel Plummer.

Crabapples—First, Mrs. C. C. McGrew; second, Mrs J. A. Peters.

Currants (White)—First, Mrs. C. C. McGrew; second, Mrs. Wm. P. Bossenberger, Williams.

Currants (Red)—First, Mrs. C C. McGrew; second, Mrs. Lizzie Ritzinger, Sigourney.

Dewberries—First, Mrs. C. C. McGrew; second, Mrs. C. E. Stephenson.

Gooseberries—First, Mrs. Geo. Newkirk, Des Moines; second, Mrs. Ella Plummer.

Grapes (White)—First, Mrs. Ella Plummer; second, Hazel Plummer.

Grapes (Blue)—Mrs. Ella Plummer; second, Hazel Plummer.

Ground Cherries—First, Mrs. C. C. McGrew; second, Mrs. Wm. P. Bossenberger.

Peaches—First, Mrs. C. C. McGrew; second, Mrs. J. A. Peters.

Pears—First, Mrs. C. C. McGrew; second, Mrs. Anna Gammon.

Plums—First, Mrs. Wm. Gannon, Valley Junction; second, Mrs. Anna Gammon.

Raspberries (Red)—First, Mrs. C. C. McGrew; second, Mrs. E. H. Pickering.

Raspberries (Black)—First, Mrs. G. Lee; second, Mrs. Wm. P. Bossenberger.

Rhubarb—First, Mrs. J. V. Patrick; second, Mrs. C. C. McGrew.

Strawberries—First, Mrs. Chas. H. Young, Ankeny; second, Mrs. Ollie Stamm, Orilla.

SPICED GOODS.

Apple—First, Mrs. C. C. McGrew; second, Mrs. S. W. Barrett.

Cherries—First, Mrs. C. C McGrew; second, Mrs. Ella Plummer.

Currants—First, Mrs. L. H. Curran; second, Mrs. C. C. McGrew.

Gooseberries—Second, Mrs. E. M. Sinclair.

Peach—First, Mrs. F. H. Sinclair; second, Mrs. E. M. Sinclair.

Pear—First, Mrs. M. Kastberg; second, Mrs. C. C. McGrew.

Plum—First, Hazel Plummer; second, Mrs. Wm. C. Bossenberger.

SWEET PICKLES.

Apple—First, Mrs. A. R. Henderson.

Citron—First, Mrs. Anna Grinstead.

Crabapple—First, Mrs. J. A. Peters; second, Mrs. C. C. McGrew.

Cucumber—First, Mrs. M. Kastberg; second, Maud Bierma.

Peach—First, Mrs. E. M. Sinclair; second, Mrs. F. H. Sinclair.

Pear—First, Mrs. E. M. Sinclair; second, Alna Grinstead.

Watermelon—First, Alna Grinstead; second, Mrs. Anna Grinstead.

Mixed—First, Mrs. Anna Grinstead; second, Mrs. Wm. P. Bossenberger.

CANNED VEGETABLES.

Corn—First, Mrs. L. P. Schlosser; second, Alna Grinstead.

String Beans—First, Maud Bierma; second, Mrs. Lizzie Ritzinger.

Shelled Beans—First, Mrs. Anna Grinstead; second, Mrs. C. C. McGrew.

Peas—First, Mrs. L. P. Schlosser; second, Mrs. Anna Gammon.

Beets—First, Mrs. C. C. McGrew; second, Maud Bierma .

Spinach—First, Mrs. C. E. Stephenson.

Other Greens—Second, Mrs. Wm. Gannon.

Asparagus—First, Mrs. L. H. Curran; second, Mrs. Wm. P. Bossenberger.

Tomatoes—First, Mrs. C. C. McGrew; second, Mrs. F. H. Sincliar.

Young Carrots—First, Mrs.. C. C. McGrew; second, Mrs. Anna Gammon.

Mixed Vegetables (for Soup)—Mrs. C. C. McGrew; second, Mrs. Wm. P. Bossenberger.

Pumpkin (for Pies)—First, Mrs. C. C. McGrew; second, Mrs. Geo. B. Brockett, Runnells.

CANNED MEAT

Chicken—Mrs. Wm. P. Bossenberger; second, Mrs. L. F. Randolph, Ankeny.

Beef—First, Mrs. G. Lee; second, Mrs. J. A. Peters.

Rabbit—First, Mrs.. C. J. Cummins.

Sausage—First, Mrs. J. A. Peters; second; Mrs. G. Lee

HONEY.

Case White Clover—First, H. A. Longworth, Polk; second, R. H. Longworth, Des Moines.

Case Italian—First, H. A. Longworth; second; R. H. Longworth; third, Bert A. Brown, Des Moines.

Case Sweet Clover—First, H. A. Longworth; second, R. H. Longworth; third, Bert A. Brown.

Case Any Other White Comb—First, H. A. Longworth; second, R. H. Longworth; third, Bert A. Brown.

Case Buckwheat—First, Bert A. Brown; second, R. H. Longworth; third, H. A. Longworth.

Best 300-pound Comb—First, R. H. Longworth; second, H. A. Longworth; third, Bert A. Brown.

Display—First, H. A. Longworth; second, Bert A. Brown; third, R. H. Longworth.

Most Attractive Display Comb Honey—First, H. A. Longworth; second, Bert A. Brown; third, R. H Longworth.

White Clover Extracted Honey in Glass—First, H. A. Longworth; second, R. H. Longworth; third, Bert A. Brown.

Linden Extracted Honey—First, Bert A. Brown; second, H. A. Longworth; third, R. H. Longworth.

Sweet Clover Extracted Honey—First, R. H. Longworth; second, H. A. Longworth; third, Bert A. Brown.

Other White Extracted Honey—First, R. H. Longworth; second, H. A. Longworth; third, Bert A. Brown.

Buckwheat, Heartsease or Any Other Dark Extracted Honey—First, Bert A. Brown.

Granulated Extracted Honey—First, Bert A. Brown; second, R. H. Longworth.

Display of Labeled Samples of Extracted Honey—First, Bert A. Brown; second, R. H. Longworth.

Most Attractive Display of Extracted Honey—First, Bert A. Brown; second, R. H. Longworth; third, H. A. Longworth.

Honey Vinegar—First, Bert A. Brown; second, R. H. Longworth; third, H. A. Longworth.

Nucleus Golden Yellow Italians and Queen in Observation Hive—First, Bert A. Brown; second, H. A. Longworth; third, Arthur Wright, Des Moines.

Leather Colored Italians and Queen, Observation Hive—First, Bert A. Brown; second, Arthur Wright; third, H. A. Longworth.

Best Display, Cooking or Baking With Honey Instead of Sugar—First, Bert A. Brown; second, Eunice Longworth, Polk; third, Mrs. Cyrus E. Harvey.

Best Queens Shown in Cages—First, Bert A. Brown.

Queen-Rearing Outfit—First, Bert A. Brown; second, H. A. Longworth.

Most Perfect Brood Combs—First, Bert A. Brown.

Beeswax, 10 Pounds—First, R. H. Longworth; second, Bert A. Brown; third, H. A. Longworth.

Exhibit of Beekeepers' Associations, Including All Apiary Products and Supplies—First, Polk County Beekeepers' Association.

Sweepstakes—First, Bert A. Brown; second, R. H. Longworth; third, H. A. Longworth.

BUTTER AND CHEESE AWARDS.

SUPERINTENDENT........................W. B. BARNEY, Des Moines.

JUDGES....................................... F. W. STEPHENSON
B. O. BROWNLEE
L. P. ANDERSON

CREAMERY BUTTER—GATHERED CREAM CHEESE.

C. B. Peterson, Exira, Iowa	96¾
Ray A. Trebil, Manly, Iowa	96¼
M. P. Christiansen, Algona, Iowa	95½
H. H. Jensen, Clark's Grove, Minn	95½
Carl Hovland, Lake Mills, Iowa	95
Albert Fenger, Whittemore, Iowa	94¾
H. Lauridsen, Dedham, Iowa	94¾
Andrew Anderson, Graettinger, Iowa	94½
F. H. Harms, Tripoli, Iowa	94
Wm. Helgason, Wallingford, Iowa	94
H. C. Stendel, Northwood, Iowa	94
Chris B. Jensen, R. 5, Harlan, Iowa	94

H. W. Jarchow, Germania, Iowa	93½
S. A. Rushley, Leland, Iowa	93½
L. H. Larsen, Roland, Iowa	93⅓
C. R. Conway, Garner, Iowa	93½
A. McCardle, Gladbrook, Iowa	93
J. C. Jensen, Ringsted, Iowa	92½
N. O. Dahlen, Northwood, Iowa	92½
F. D. Warner, Northwood, Iowa	92½
R. C. Rasmussen, Crystal Lake, Iowa	92½
John Christiansen, Little Cedar, Iowa	92
C. N. Chyle, Protivin, Iowa	92
Fred J. Havens, Farley, Iowa	91½
Aug M. Hein, Farley, Iowa	91
A. D. Geiner, Klemme, Iowa	91
Henry E. Theis, Bancroft, Iowa	91
Henry Hansen, Graettinger, Iowa	91
Chris Jessen, State Center, Iowa	90½
J. O. Ersland, Rockford, Iowa	90
R. H. Litts, Toronto, Iowa	90
Geo. E. Denton, Langworthy, Iowa	89½
M. Van Dann, Guthrie Center, Iowa	89
Carl Lynge, Exira, Iowa	89
Average score of creamery butter, gathered cream class	92¾

CREAMERY BUTTER—WHOLE MILK CLASS.

Ed. M. Guiney, Tripoli, Iowa	96½
H. C. Ladage, Strawberry Point, Iowa	96
D. J. Allenstein, Bremer, Iowa	95
Carl L. Gamm, Waverly, Iowa	94½
W. P. Hughes, Sumner, Iowa	94½
H. A. Griese, Readlyn, Iowa	94
H C. Koeneke, Denver, Iowa	93½
P. J. Olds, Sumner, Iowa	93½
E. B. Olds, Sumner, Iowa	93½
C. J. Meier, R. 5, Waverly, Iowa	93½
G. A. Hanson, Oelwein, Iowa	93
O. H. Buehrer, Denver, Iowa	92½
Chris. Russler, Fredericksburg, Iowa	92½
A. L. Nichols, Sumner, Iowa	93½
F. W Bremer, Sumner, Iowa	92¼
Rich L. Alderson, Plainfield, Iowa	92
F. D. Daniels, Shell Rock, Iowa	92
Roy Scoles, Sumner, Iowa	92
W. H. Eischeid, Edgewood, Iowa	91½
Erve A. Cole, Lamont, Iowa	91½
L. E. Nelson, Randall, Iowa	91
W. E. Hunter, Iowa City, Iowa	90
F. F. Wilcox, Panora, Iowa	89
Average score creamery butter, whole milk class	93

DAIRY BUTTER.

Mrs. Otto Rasmussen, Altoona, Iowa	93½
A. C. Adamson, Ankeny, Iowa	92
Mrs. J. A. Peters, Ankeny, Iowa	91¾

CHEESE.

Bert McKinney, Gratiot, Wis.	94½
H. A. Kalk, Sheboygan Falls, Wis.	93½
P. W. Knudson, Barneveld, Wis.	92
P. H. Kasper, Bear Creek, Wis.	95

FRUIT AWARDS

SUPERINTENDENT........................ELMER M. REEVES, Waverly.

APPLES.

NORTHERN DISTRICT.

JUDGE..H. E. NICHOLS.

Collection, Not Less Than Twenty Varieties, or More Than Fifty—First, C. H. True, Edgewood; second, Isaac Johnson, West Union.

Four Varieties, Summer—First, C. H. True; second, Isaac Johnson.

Six Varieties, Fall—First, C. H. True; second, Isaac Johnson.

Six Varieties, Winter—First, C. H. True; second, Isaac Johnson.

CENTRAL DISTRICT.

Collection, Not Less Than Twenty Varieties, or More Than Fifty—First, E. O. Worth, Mondamin; second, M. J. Worth, Mondamin; third, M. C. Worth, Mondamin; fourth, LeGrand Orchard Demonstration Club, LeGrand, Iowa; fifth, F. O. Harrington, Williamsburg.

Four Varieties, Summer—First, E. O. Worth; second, M. J. Worth; third, LeGrand Orchard Demonstration Club; fourth, W. C. Worth; fifth, F. O. Harrington.

Six Varieties, Fall—First, W. C. Worth; second, LeGrand O. D. Club; third, E. O. Worth; fourth, M. J. Worth; 5th, F. O. Harrington.

Six Varieties, Winter—First, E. O. Worth; second, M. J. Worth; third, W. C. Worth; fourth, LeGrand O. D. Club; fifth, F. O. Harrington.

CAPITAL DISTRICT.

Collection Not Less Than Twenty Varieties, or More Than Fifty—First, Charles O. Garrett; second, Cyrus E. Harvey; third, Apple Grove Orchard, Mitchellville.

Four Varieties, Summer—First, Cyrus E. Harvey; second, Charles O. Garrett.

Six Varieties, Fall—First, Charles O. Garrett; second, Cyrus E. Harvey; third, Apple Grove Orchard.

Six Varieties, Winter—First, Charles O. Garrett; second, Apple Grove Orchard; third, Cyrus E. Harvey.

SOUTHERN DISTRICT.

Collection Not Less Than Twenty Varieties, or More Than Fifty—First, Thomas Enright, Patterson; second, Geo. A. Schurk, Fort Madison; third, A. H. Soder, Hartford; fourth, L. L. Driebelbis, Creston; fifth, J. F. Wellons, Indianola.

Four Varieties, Summer—First, Thomas Enright; second, A. H. Soder; third, J. F. Wellons; fourth, Geo. A. Schurk.

Six Varieties, Fall—First, Thomas Enright; second, A. H. Soder; third, L. L. Driebelbis; fourth, J. F. Wellons.

Six Varieties, Winter—First, Thomas Enright; second, L. L. Driebelbis; third, Geo. A. Schurk; fourth, A. H. Soder; fifth, J. F. Bennett, Thurman.

HOME ORCHARD COLLECTION.

Northern District—First, C. H. True; second, Isaac Johnson.

Central District—First, E. O. Worth; second, W. C. Worth; third, LeGrand O. D. Club; fourth, M. J. Worth; fifth, F. O. Harrington.

Capital District—First, Apple Grove Orchard; second, Charles O. Garrett; third, Cyrus E. Harvey.

Southern District—First, Thomas Enright; second, George A. Schurk; third, L. L. Driebelbis; fourth, A. H. Soder; fifth, J. F. Wellons.

PACKAGE COMMERCIAL APPLES.

JUDGE..F. M. HARRINGTON.

Northern District—First, C. H. True on Five Varieties—Isaac Johnson on One Variety.

Central District—First, W. C. Worth on four varieties; M. J. Worth on three varieties; E. O. Worth on three varieties.

Second—E. O. Worth on four varieties; W. C. Worth on four varieties; M. J. Worth on two varieties.

Third—M. J. Worth on five varieties; W. C. Worth on two varieties; E. O. Worth on three varieties.

UNNAMED SEEDLING APPLES.

JUDGE..H. E. NICHOLS.

Six specimens to constitute plate—First, J. A. Wellons; second and third, Cyrus E. Harvey; fourth, Charles O. Garrett.

Best exhibit seedling apples—First, Cyrus E. Harvey; second, Isaac Johnson.

PLATES.

NORTHERN DISTRICT.

JUDGE..H. E. NICHOLS.

First, Isaac Johnson on three varieties; C. H. True on twenty-four varieties.

Second, C. H. True on four varieties; Isaac Johnson on twenty-five varieties.

CENTRAL DISTRICT.

JUDGE..F. M. HARRINGTON.

First, E. O. Worth on ten varieties; M. J. Worth on eleven varieties; W. C. Worth on three varieties; F. O. Harrington on five varieties; LeGrand O. D. Club on one variety.

Second, E. O. Worth on eleven varieties; M. J. Worth on ten varieties; W. C. Worth on three varieties; F. O. Harrington on two varieties; LeGrand O. D. Club on two varieties.

Third, E. O. Worth on five varieties; M. J. Worth on six varieties; W. C. Worth on fourteen varieties; F. O.Harrington on two varieties.

CAPITAL DISTRICT.

JUDGE..F. M. HARRINGTON.

First, Cyrus E. Harvey on three varieties; Apple Grove Orchard on four varieties; Charles O. Garrett on twenty-three varieties.

Second, Cyrus E. Harvey on seventeen varieties; Apple Grove Orchard on five varieties; Charles O. Garrett on six varieties.

Third, Cyrus E. Harvey on eight varieties; Apple Grove Orchard on two varieties; Charles O. Garrett on one variety.

SOUTHERN DISTRICT.

JUDGE..R. S. HERRICK.

First, L. L. Driebelbis on four varieties; Thomas Enright on ten varieties; A. H. Soder on six varieties; J. F. Wellons on one variety; J. F. Bennett on two varieties; George A. Schurk on seven varieties.

Second, A. H. Soder on eleven varieties; George A. Schurk on two varieties;

J. F. Bennett on three varieties; Thomas Enright on eight varieties; L. L. Driebelbis on three varieties; J. F. Wellons on three varieties.

Third, Thomas Enright on eight varieties; J. F. Bennett on four varieties; J. F. Wellons on three varieties; A. H. Soder on four varieties; George A. Schurk on two varieties; L. L. Driebelbis on four varieties.

TWENTY-FIVE PLATE DISPLAY.

JUDGE..H. E. NICHOLS.

NORTHERN DISTRICT.

First. T. H. True.

CENTRAL DISTRICT.

First, M. J. Worth; second, W. C. Worth; third, E. O. Worth.

CAPITAL DISTRICT.

First, Charles O. Garrett; second, Apple Grove Orchard; third, Cyrus E. Harvey.

SOUTHERN DISTRICT.

First, Thomas Enright; second, J. F. Bennett; third, Geo. A. Schurk; fourth, A. H. Soder.

CRABS.

JUDGE..R. S. HERRICK.

NORTHERN DISTRICT.

First, C. H. True on five varieties.

Second, Isaac Johnson on five varieties.

CENTRAL DISTRICT.

JUDGE..........................:....................F. M. HARRINGTON.

First, F. O. Harrington on two varieties; W. C. Worth on one variety; M. J. Worth on one variety; E. O. Worth on four varieties.

Second, LeGrand O. D. Club on one variety; M. J. Worth on four varieties; E. O. Worth on two varieties.

Third, W. C. Worth on three varieties; M. J. Worth on two varieties.

CAPITAL DISTRICT.

JUDGE..F. M. HARRINGTON.

First, Charles O. Garrett on two varieties; Cyrus E. Harvey on two varieties; Mrs. Ella Plummer on two varieties.

Second, Charles O. Garrett on one variety; Cyrus E. Harvey on three varieties.

Third, Apple Grove Orchard on two varieties; Mrs. Ella Plummer on one variety.

SOUTHERN DISTRICT.

JUDGE..R. S. HERRICK.

First, L. L. Driebelbis on one variety; Thomas Enright on four varieties; J. F. Wellons on one variety.

Second, L. L. Driebelbis on one variety; A. H. Soder on one variety; J. F. Wellons on one variety.

Third, J. F. Wellons on one variety.

NATIVE OR HYBRID CRABS.

NORTHERN DISTRICT.

JUDGE..R. S. HERRICK.

First, C. H. True; second, Isaac Johnson.

CENTRAL DISTRICT.

JUDGE..F. M. HARRINGTON.

First, F. O. Harrington.

SOUTHERN DISTRICT.

JUDGE..R. S. HERRICK.

First, J. F. Wellons.

PLATE DISPLAY.

JUDGE..F. M. HARRINGTON.

Best Ten Plates Wealthy—First, Apple Grove Orchard; second, Charles O. Garrett; third, Cyrus E. Harvey; fourth, George A. Schurk.

Best Ten Plate Exhibit, Each of Three Other Varieties to be Selected—First, M. J. Worth; second, Charles O. Garrett; third, J. F. Bennett; fourth, George A. Schurk; fifth, Apple Grove Orchard; sixth, Cyrus E. Harvey.

First, Apple Grove Orchard; second, J. F. Bennett; third, George A. Schurk; fourth, Charles O. Garrett; fifth, Cyrus E. Harvey.

First, George A. Schurk; second, E. O. Worth; third, Charles O. Garrett; fourth, Apple Grove Orchard; fifth, F. E. Bennett.

SWEEPSTAKES PLATES.

JUDGES..H. E. NICHOLS.
F. M. HARRINGTON.
R. S. HERRICK.

Duchess—First, E. O. Worth; second, Charles O. Garrett; third, W. C. Worth; fourth, J. F. Wellons; fifth, M. J. Worth.

Wealthy—First, Cyrus E. Harvey; second, Apple Grove Orchard; third, C. H. True; fourth, M. J. Worth; fifth, A. H. Soder.

Jonathan—First, E. O. Worth; second, M. J. Worth; third, Thomas Enright; fourth, W. C. Worth; fifth, Geo. A. Schurk.

Grimes Golden—First, George A. Schurk; second, E. O. Worth; third, M. J. Worth; fourth, J. F. Bennett; fifth, A. H. Soder.

Delicious—First, George A. Schurk; second, Thomas Enright; third, E. O. Worth; fourth, Charles O. Garrett; fifth, J. F. Bennett.

Stayman—First, Charles O. Garrett; second, M. J. Worth; third, E. O. Worth; fourth, A. H. Soder.

N. W. Greening—First, Apple Grove Orchard; second, Thomas Enright; third, W. C. Worth; fourth, Charles O. Garrett; fifth, C. H. True.

Maiden Blush—First, Geo. A. Schurk; second, Cyrus E. Harvey; third, C. H. True; fourth, Thomas Enright; fifth, E. O. Worth.

Gano—First, M. J. Worth; second, J. F. Bennett; third, E. O. Worth; fourth, A. H. Soder; fifth, Thomas Enright.

Optional—First, M. J. Worth; second, Geo. A. Schurk; third, Charles O. Garrett; fourth, C. H. True; fifth, Cyrus E. Harvey.

DISPLAY OF FRUITS.

JUDGE...H. E. NICHOLS.

General Collection—First, Cyrus E. Harvey; second, Charles O. Garrett; third, J. F. Wellons.

ORNAMENTAL DESIGNS IN FRUITS.

JUDGES... { A. H. SMITH. W. GREEN.

Best and Most Attractive Basket of Fruit—First, Alna Grinstead; second, Charles O. Garrett; third, Mrs. Frank Stuart, Des Moines; fourth, Mrs. O. A. Decker; fifth, J. F. Wellons; sixth, Hazel Plummer; seventh, Mrs. Cyrus E. Harvey; eighth, Cyrus E. Harvey; ninth, Anna Grinstead; tenth, E. N. Garrett, Des Moines; eleventh, Fern Justice, Ankeny; twelfth, Mrs. Ella Plummer; thirteenth, A. H. Soder.

PEARS.

JUDGE...R. S. HERRICK.

Collection of Pears Not Less Than Fifteen Varieties—First, J. F. Wellons; second, Cyrus E. Harvey; third, E. O. Worth.

Plates Any Worthy Variety—First, Geo. A. Schurk on four varieties; Cyrus E. Harvey on three varieties; Charles O. Garrett on two varieties; E. O. Worth on two varieties; J. L. Todd on one variety; J. F. Wellons on three varieties.

Second, Charles O. Garrett on two varieties; Cyrus E. Harvey on one variety; J. F. Wellons on two varieties; A. H. Soder on one variety; E. O. Worth on one variety.

Largest and Best Collection Per Plate, Distinct Varieties—First, J. F. Wellons on eighteen varieties; second, Cyrus E. Harvey on eight varieties.

PEACHES.

JUDGE...S. A. BEACH.

SOUTHERN DISTRICT.

Plates, Worthy Varieties—First, J. F. Wellons; second, J. L. Todd.

Necterine—First, J. L. Todd.

GRAPES.

SOUTHERN DISTRICT.

JUDGE...S. A. BEACH.

Best and Largest Collection of Grapes, Four Bunches to the Plate—First, Charles O. Garrett; second, Cyrus E. Harvey; third, R. C. Roup & Son, Ames.

Campbell's Early—First, F. O. Harrington; second, A. H. Soder.

Variety Pockington—First, J. F. Wellons; second, Cyrus E. Harvey.

Concord—First, Charles O. Garrett; second, R. C. Roup & Son.

Worden—First, W. A. Pickering; second, Mrs. W. M. Riley, Patterson.

Delaware—First, Charles O. Garrett; second, F. O. Harrington.

Eaton—First, F. O. Harrington.

Woodruff Red—First, F. O. Harrington.

Wyoming Red—First, Charles O. Garrett; second, J. F. Wellons.

Moore's Early—First, W. A. Pickering; second, Charles O. Garrett.

Moore's Diamond—First, F. O. Harrington; second, Charles O. Garrett.

Niagara—First, Charles O. Garrett; second, Mrs. W. M. Riley.

Agawam—First, Charles O. Garrett; second, J. F. Wellons.

Brighton—First, F. O. Harrington.

Four Bunches of Grapes of Varieties Not Named Above—First, R. C. Roup & Son on one variety; Cyrus E. Harvey on two varieties; F. O. Harrington on two varieties; Charles O. Garrett on one variety.

Second, Cyrus E. Harvey on two varieties; Charles O. Garrett on one variety; R. C. Roup & Son on one variety.

PLUMS.

Northern District.

Judge...S. A. Beach.

Largest and Best Exhibit of Plums Not Less Than Fifteen Varieties—Isaac Johnson.

DeSota—First, Isaac Johnson.

Plates Wolf—Isaac Johnson.

Plates Wyant—Isaac Johnson.

Plates Minor—First, C. H. True; second, Isaac Johnson.

Plates Wild Goose—Isaac Johnson.

Plates not named on list—

Bixby—C. H. True.

Rockford—Isaac Johnson.

Weaver—Isaac Johnson.

Anderson—Isaac Johnson.

Best Plate Japan or Hybrid Plums.

Hanska—Isaac Johnson.

Southern District.

Judge ....S. A. Beach

Largest and Best Exhibit of Plums Not Less Than Fifteen Varieties—First. Cyrus Harvey; second, Charles O. Garrett; third, J. F. Wellons.

Plates DeSota—First, Charles O. Garrett; second, J. F. Wellons.

Plates Forest Garden—First, Charles O. Garrett; second, Cyrus E. Harvey.

Plates Hawkeye—First, Charles O. Garrett; second, Cyrus E. Harvey.

Plates Wolf—First, Charles O. Garrett; second, J. F. Wellons.

Plates Wyant—First, Charles O. Garrett; second, Cyrus E. Harvey.

Plates Stoddard—First, Cyrus E. Harvey; second, Charles O. Garrett.

Plates Miner—First, Charles O. Garrett; second, Cyrus E. Harvey.

Plates Wild Goose—First, Cyrus E. Harvey.

Plates Hunt—First, Charles O. Garrett; second, Cyrus E. Harvey.

Plates Damson—First, John W. Pearson, Mitchellville; second, Cyrus E. Harvey.

Plates Perry—First, Charles O. Garrett; second, Cyrus E. Harvey.

Plates Lombard—First, J. W. Pearson; second, Cyrus E. Harvey.

Best Plate Domestic Plums—

Duane Purple—First, Cyrus E. Harvey.

Deaton—Second, Charles O. Garrett.

Best Plate Not Named on List—

Deaton—First, Charles O. Garrett; second, Cyrus E. Harvey.

Damson—First, J. F. Wellons; second, Cyrus E. Harvey.

Gold—First, E. O. Worth; second, M. J. Worth.

Best Exhibit Domestic Plums Not Less Than Five Varieties—First, Cyrus E. Harvey; second, J. F. Wellons.

Best Exhibit Japan Plums—First, Charles O. Garrett; second, Geo. A. Schurk.

Best Plate Japan or Hybrid Plums Not Entered in Collection—First, Ceresota, Chas. O. Garrett. Hanska; George A. Schurk.

NATIVE PLUM SEEDLINGS.

Judge..H. E. Nichols.

First, Charles O. Garrett; second, Cyrus E. Harvey; third, Isaac Johnson;

NATIVE FRUITS.

Judges.. R. S. Herrick.
H. E. Nichols

Plates Elderberry—First, Charles O. Garrett; second, S. D. Whinnery.

Plates Juneberry—First, Cyrus E. Harvey.

Plates Fresh Strawberry, Progressive—Cyrus E. Harvey.

Plates Fresh Strawberry, Other Variety—Cyrus E. Harvey.

Plates of Each Other Native Fruit—

Wild Grape—First, J. F. Wellons; second, Cyrus E. Harvey.

Choke Cherry—First, S. D. Whinnery.

Black haw—First, J. F. Wellons; second, S. D. Whinnery.

Red Haws—First, S. D. Whinnery; second, J. F. Wellons.

Buffalo Berry—First, Cyrus E. Harvey.

Paw Paws—J. L. Todd.

Blackberries—First, J. L. Todd; second, Cyrus E. Harvey.

Mullberries—First, Charles O. Garrett; second, Cyrus E. Harvey.

May Apple—First, J. F. Wellons.

Wild Goose Berry—First, Cyrus E. Harvey.

Wild Crabs—First, J. L. Todd; second, Cyrus E. Harvey.

Best Collection of Native Fruits—First, Cyrus E. Harvey; second, S. D. Whinnery; third, Ed Stuart; fourth, J. L. Todd.

EDIBLE NUTS GROWN IN IOWA, NATIVE OR FOREIGN ORIGIN.

Judges.. H. E. Nichols.
R. S. Herrick.

Plates Black Walnuts—First, Charles O. Garrett; second, A. H. Soder.

Plates White Walnuts or Butternuts—First, Charles O. Garrett; second, Cyrus E. Harvey.

Plates Shell-bark Hickory Nuts—First, J. F. Wellons; second, Charles O. Garrett.

Plates Hazel Nuts—First, Ed Stuart; second, Cyrus E. Harvey.

Plates Sweet Chestnuts—First, J. F. Wellons; second, Ed Stuart.

Plates Pecan—First, Ed Stuart.

Plates Peanuts—First, Clyde L. Stuart; second, J. F. Wellons.

Best Collection of Nuts—First, Ed Stuart; second, J. F. Wellons.

FLORICULTURE

SUPERINTENDENT........................WESLEY GREENE, Des Moines.

JUDGE..ARTHUR H. SMITH.

PROFESSIONAL LIST.

PLANTS IN POTS.

Collection of Plants in Bloom, Not Less Than Twenty-five Varieties—First, Iowa Seed Co., Des Moines; second, J. S. Wilson, Floral Co., Des Moines; third, Kirkwood Floral Co., Des Moines.

Collection of Foliage or Decorative Plants, Not Less Than Twenty Varieties, Excluding Palms and Ferns—First, J. S. Wilson, Floral Co.; second, Iowa Seed Co.; third, Kirkwood Floral Co.

Collection of Palms—First, Iowa Seed Co.; second, J. S. Wilson Floral Co.; third, Kirkwood Floral Co.; fourth, Alpha Floral Co.

Collection of Ferns—First, Iowa Seed Co.; second, J. S. Wilson Floral Co.; third, Kirkwood Floral Co.; fourth, Alpha Floral Co.

Collection of Coleus—First, Iowa Seed Co.; second, J. S. Wilson Floral Co.; third, Kirkwood Floral Co.

Collection of Geraniums—First, Iowa Seed Co.; second, J. S. Wilson Floral Co. third, Kirkwood Floral Co.

Collection of Flowering Begonias—First, Iowa Seed Co.; second, Kirkwood Floral Co.

Collection of Rex Begonias—First, Iowa Seed Co.

Collection of Fancy-leaved Caladium—First, Iowa Seed Co.; second, J. S. Wilson Floral Co.; third, Alpha Floral Co.

Collection of Crotons—First, Iowa Seed Co.; second, Kirkwood Floral Co.; third, J. S. Wilson Floral Co.

Collection of Cannas—First, Iowa Seed Co.; second, J. S. Wilson Floral Co.

Specimens of Areca Lutescens—First, Iowa Seed Co.; second, Alpha Floral Co.; third, J. S. Wilson Floral Co.

Specimen Kentia Belmoreana—First, Kirkwood Floral Co.; second, Iowa Seed Co.; third, Wilson Floral Co.

Specimen Kentia Fosterina—First, Kirkwood Floral Co.; second, J. S. Wilson Floral Co.; third, Alpha Floral Co.

Specimen Phoenix Canariensis—First, Iowa Seed Co.; second, J. S. Wilson Floral Co.; third, Alpha Floral Co.

Specimen Phoenix Robelenii—First, J. S. Wilson Floral Co.; second, Iowa Seed Co.; third, Alpha Floral Co.

Specimen Any Other Variety of Palm—First, Iowa Seed Co.; second, J. S. Wilson Floral Co.; third, Alpha Floral Co.

Specimen Cycas Revoluta—First, Iowa Seed Co.; second, J. S. Wilson, Floral Co.; third, Alpha Floral Co.

Specimen Arancaria—First, J. S. Wilson Floral Co.; second, Iowa Seed Co.; third, Alpha Floral Co.

Specimen Dracaena—First, J. S. Wilson Floral Co.; second, Iowa Seed Co.; third, Kirkwood Floral Co.

Specimen Nephrolepsis Bostoniensis—First, J. S. Wilson Floral Co.; second. Alpha Floral Co.; third, Iowa Seed Co.

Specimen Nephrolepsis Whitmanii—First, Iowa Seed Co.; second, Alpha Floral Co.; third, J. S. Wilson Floral Co.

Specimen Any Other Variety Fern—First, Iowa Seed Co.; second, J. S. Wilson Floral Co.; third, Alpha Floral Co.

Specimen Asparagus Sprengeri—First, Alpha Floral Co.; second, J. S. Wilson Floral Co; third, Kirkwood Floral Co.

Case of Plants—First, Kirkwood Floral Co.; second, Iowa Seed Co.; third, J. S. Wilson Floral Co.

Basket of Plants—First, Kirkwood Floral Co.; second, Iowa Seed Co.; third, J. S. Wilson Floral Co.

FLORAL DESIGNS AND CUT FLOWERS.

Display of Cut Flowers—First, Alpha Floral Co.; second, J. S. Wilson Floral Co.; third, Iowa Seed Co.

Display of Gladoli—First, Geo. S. Woodruff, Independence; second, Iowa Seed Co.

Fifty Pink Carnations—First, J. S. Wilson Floral Co.

Fifty White Carnations—First, J. S. Wilson Floral Co.

Wreath of Flowers, Frame Not to Exceed Twenty-four Inches, on Easel—First, J. S. Wilson Floral Co.; second, Alpha Floral Co.

Single Spray of Flowers—First, Alpha Floral Co.; second, J. S. Wilson Floral Co.

Display of Asters—First, Alpha Floral Co.; second, J. S. Wilson Floral Co.

Floral Design (Wreath Excluded)—First, Alpha Floral Co.; second, J. S. Wilson Floral Co.; third, Lozier, The Florist.

Twelve Spikes America Gladiolus—First, Geo. S. Woodruff; second, Alpha Floral Co.

Twelve Spikes Augusta—First, Geo. S. Woodruff.

Twelve Spikes Mrs. Francis King—First, Geo. S. Woodruff; second, Alpha Floral Co.

Twelve Spikes Yellow Gladiolus—First, Alpha Floral Co.; second, Geo. S. Woodruff.

Twelve Spikes Any Other Variety—First, Geo. S. Woodruff; second, Alpha Floral Co.

Table Decorations For a Dinner With Covers For Six—First, J. S. Wilson Floral Co.; second, Alpha Floral Co.; third, Lozier, The Florist; fourth, Alfred G. Lozier.

Twelve American Beauty Roses—First, Lozier, The Florist; second, Alpha Floral Co.; third, J. S. Wilson Floral Co.

Twenty-five Mrs. Chas. Russell—First, Alpha Floral Co.; second, J. S. Wilson Floral Co.; third, Lozier, The Florist.

Twenty-five Mrs. Aaron Ward—First, Alpha Floral Co.; second, Lozier, The Florist; third, J. S. Wilson Floral Co.

Twenty-five Sunburst—First, Alpha Floral Co.; second, Lozier, The Florist; third, J. S. Wilson Floral Co.

Twenty-five Red Roses—First, Lozier, The Florist; second, Alpha Floral Co.; third, J. S. Wilson Floral Co.

Twenty-five Pink Roses—First, Alpha Floral Co; second, Lozier, The Florist; third, J. S. Wilson Floral Co.

Twenty-five White Roses—First, J. S. Wilson Floral Co.; second, Alpha Floral Co.; third, Lozier, The Florist.

Twenty-five Roses Any Other Color—First, Lozier, The Florist; second, J. S. Wilson Floral Co.; third, Alpha Floral Co.

Basket Assorted Flowers—First, Alpha Floral Co.; second, J. S. Wilson Floral Co.; third, Lozier, The Florist.

Bride's Bouquet—First, Alpha Floral Co.; second, J. S. Wilson Floral Co.; third, Lozier, The Florist.

Corsage Bouquet—First, Alpha Floral Co.; second, J. S. Wilson Floral Co.

Vase Assorted Flowers—First, J. S. Wilson Floral Co.; second, Alpha Floral Co.; third, Lozier, The Florist.

AMATEUR LIST.

PLANTS IN POTS.

Collection of Plants Arranged For Effect, Not Less Than Twenty Varieties—First, Mrs. M. Bredimus, Des Moines; second, Cyrus E. Harvey.

Collection of Ferns—First, Mrs. M. Bredimus.

Collection of Agares, Cactus and Succulents—First, Mrs. M. Bredimus.

Collection of Begonias—First, Mrs. M. Bredimus; second, Cyrus E. Harvey.

Collection of Coleus—First, Mrs. M. Bredimus; second, Cyrus E. Harvey.

Collection of Geraniums—First, G. Englebrecht, Valley Junction; second, Cyrus E. Harvey; third, Mrs. M. Bredimus.

Collection of Abutilons—First, Mrs. M. Bredimus.

Collection of Fuchias—First, Cyrus E. Harvey; second, Mrs. M. Bredimus.

Collection of Cannas—First, Mrs. M. Bredimus.

Specimen of Foliage Plant—First, Mrs. M. Bredimus.

Specimen Lantana—First, Mrs. M. Bredimus.

Specimen Flowering Begonia—First, Mrs. M. Bredimus; second, Cyrus E. Harvey.

Specimen Geranium—First, Cyrus E. Harvey; second, Mrs. M. Bredimus.

Specimen Fern—First, Mrs. M. Bredimus.

Specimen Abutilon—First, Mrs. M. Bredimus.

Specimen Asparagus Sprengari—First, Mr. and Mrs. Frank Harris; second Mrs. P. S. Brunk, Altoona; third, Mrs. M. Bredimus.

Specimen Any Plant In Bloom—First, Cyrus E. Harvey; second, Mrs. M. Bredimus.

Vase of Plants—First, Ada Boore Newquist; second, Mrs. M. Bredimus.

Basket of Plants—First, Ada Boore Newquist; second, Mrs. M. Bredimus.

CUT FLOWERS.

Display of Cut Flowers—First, Miss J. Collins; second, Ada Boore Newquist; third, Mrs. M. Bredimus; fourth, Mrs. Conn Andrew; fifth, Cyrus E. Harvey.

Display of Zinnias—First, Cyrus E. Harvey; second, Miss J. Collins; third, Mrs. M. Bredimus.

Display of Salpiglossis—First, Miss J. Collins; second, Mrs. M. Brediums.

Display of Petunias—First, Cyrus E. Harvey; second, Mrs. M. Bredimus; third, Ada Boore Newquist.

Display of Calliopsis—First, Cyrus E. Harvey; second, Miss J. Collins; third, Mrs. M. Bredimus.

Display of Ornamental Grasses—First, Mrs. M. Bredimus; second, Miss J. Collins; third, Ada Boore Newquist.

Display of Gladioli—First, Ada Boore Newquist; second, Miss J. Collins; third, Mrs. M. Bredimus; fourth, Cyrus E. Harvey.

Six Spikes Scarlet Gladioli—First, Ada Boore Newquist; second, Mrs. M. Bredimus; third, Cyrus E. Harvey.

Six Spikes Pink Gladioli—First, Cyrus E. Harvey; second, Ada Boore Newquist; third, Mrs. M. Bredimus.

Six Spikes White Gladioli—First, Mrs. M. Bredimus; second, Cyrus E. Harvey.

Six Spikes Any Other Color—First, Miss J. Collins; second, Cyrus E. Harvey; third, Mrs. M. Bredimus.

Display of Asters—First, Ada Boore Newquist; second, Mrs. M. Bredimus; third, Miss J. Collins; fourth, Cyrus E. Harvey.

Display of Dianthus—First, Mrs. M. Bredimus; second, Cyrus E. Harvey; third, Ada Boore Newquist; fourth, Miss J. Collins.

Display of Marigolds—First, Cyrus E. Harvey; second, Miss J. Collins; third, Mrs. M. Bredimus; fourth, Ada Boore Newquist.

Display of Dahlias—First, Cyrus E. Harvey.

Display of Phlox—First, Miss J. Collins; second, Cyrus E. Harvey; third, Mrs. M. Bredimus; fourth, Ada Boore Newquist.

Display of Geraniums—First, Miss J. Collins; second, Mrs. M. Bredimus; third, Cyrus E. Harvey.

Display of Verbenas—First, Ada Boore Newquist; second, Cyrus E. Harvey; third, Mrs. M. Bredimus.

Display of Snapdragons—First, Ada Boore Newquist; second, Mrs. M. Bredimus; third, Miss J. Collins.

Display of Nasturtiums—First, Cyrus E. Harvey; second, Ada Boore Newquist; third, Mrs. M. Bredimus.

Display of Larkspur—First, Miss J. Collins; second, Mrs. M. Bredimus; third, Cyrus E. Harvey.

Display of Corn Flowers—First, Miss J. Collins; second, Mrs. M. Bredimus; third, Ada Boore Newquist.

Display of Balsams—First, Miss J. Collins; second, Cyrus E. Harvey; third, Mrs. M. Bredimus.

Display of Scabiosa—First, Cyrus E. Harvey; second, Ada Boore Newquist; third, Mrs. M. Bredimus.

Display of Pansies—First, Cyrus E. Harvey; second, Miss J. Collins; third, Ada Boore Newquist.

Display of Sweet Peas—First, Miss J. Collins; second, Mrs. M. Bredimus; third, Cyrus E. Harvey.

Display of Cosmos; First, Cyrus E. Harvey; second, Ada Boore Newquist; third, Miss J. Collins.

Display of Gaillardias—First, Miss J. Collins; second, Mrs. M. Bredimus; third, Ada Boore Newquist.

Basket of Cut Flowers—First, Ada Boore Newquist; second, Miss J. Collins; third, Adessa P. Llewellyn; fourth, Mrs. Conn Andrew.

Bouquet—First, Miss J. Collins; second, Ada Boore Newquist; third, Mrs. Conn Andrew; fourth, Adessa P. Llewellyn.

Vase of Cut Flowers—First, Ada Boore Newquist; second, Miss J. Collins; third, Mrs. Conn Andrew; fourth, Mrs. M. Bredimus.

TEXTILE AND CHINA DEPARTMENT

SUPERINTENDENT..........................T. C. LEGOE, What Cheer.

JUDGES.......................................
LOIS RAYNER.
ETTA HANEY.
ROBT. A. GRAHAM.

HOUSEHOLD FABRICS, QUILTS, ETC.

Ten Yards of Rag Carpet—First, E. Heydon.

Rug Any Material—First, Anne M. Meyer, Des Moines; second, Anabel Beatty Smith, Des Moines.

Velvet Quilt—First, Mrs. G. E. Robertson, Oskaloosa; second, Mrs. A. E. Eichenlaub, Des Moines.

Silk Quilt—First, Anne M. Meyer; second, Mrs. C. Stream.

Outline Quilt—First, James B. Stevens, Des Moines.

Cradle Quilt—First, Mrs. G. E. Robertson; second, Mrs. S. Stutsman, Des Moines.

Cotton Patch Work Quilt—First, Mrs. R. E. Hick, Altoona; second, Mrs. S. H. Chalfaut, Guthrie Center.

Log Cabin Quilt—Second, Mrs. A. E. Eichenlaub.

Worsted Quilt—First, E. Heydon; second, Ella Furnure, Iowa City.

Specimen of Quilting, Hand Made—First, Mary Jane Bennison, Des Moines second, Mrs. J. W. Winegardner, Des Moines.

Silk Comfort—First, Mrs. James B. Stevens; second, Mrs. Wm. L. Scheel, Des Moines.

PICNIC PARTIES AT THE 1919 STATE FAIR

Cotton Comfort—First, Mrs. Lizzie Ritzinger; second, Mrs. R. E. Frich, Des Moines.

Cotton Applique Quilt—First, Mrs. W. C. Raney, Des Moines.

Cotton Braided Rug—First, Anne M. Meyer; second, Mrs. Wm. L. Scheel.

Cotton Pieced Quilt—First, Mrs. L. G. Miller, Des Moines; second, Mrs. W. C. Raney.

Woven Cotton Rug—First, E. Heydon; second, Anne M. Meyer.

Work Other Than Named—First, Mrs. Rev. A. Anderson Lanyan; second, Mrs. W. H. Barton, Des Moines.

ECONOMY CLASSIFICATION.

Work Dress—First, M. J. Thomas, Des Moines; second, Ella F. Perkins, Des Moines.

Work Apron—First, Mabel C. Luther, Des Moines; second, Bud Decker Smith, Des Moines.

Made Over Dress—First, Mrs. F. E. Scott, Bondurant; second, Ella F. Perkins.

Dress Made From Cast-Off Garments, For Child Under Eight Years—First, Mrs. F. E. Scott; second, Emma R. Roberts, Des Moines.

Child's Coat Made From Old Garments—First, Mrs. James B. Stevens; second, Emma R. Roberts.

Child's Underwear Made From Cast-Off Knitted Underwear—First, Mrs. Wm. L. Scheel.

Clothing Made From Flour or Sugar Sacks—First, Emma R. Roberts; second, P. O. Weaver, Adelphi.

Boy's Suit Made From Cast-Off Garments—First, Mrs. F. E. Scott; second, Stella Alexander, Des Moines.

Child's Clothing Made From Old Stockings—First, James B. Stevens; second, Emma R. Roberts.

DARNING.

Darning on Wool Garment—First, Emma R. Roberts.

Darning on Silk Garment—First, Mary A. McLennan, Des Moines; second, Jane Adamson, Ankeny.

Darning on Cotton Garment or Household Article—First, Mary A. McLennan; second, Jane Adamson.

Darning on Linen Garment or Household Article—First, Mrs. M. A. Corrough, Bondurant; second, Jane Adamson.

PATCHING.

Patching on Silk Garment—First, Emma R. Roberts; second, Jane Adamson.

Patching on Wool Garment—First, Emma R. Roberts; second, Jane Adamson.

Patching on Cotton Garment or Household Article—First, Mrs. Lizzie Ritzinger; second, Jane Adamson.

KNITTED WORK.

Specimen Knit Lace, Not Less Than Two Yards—First, M. J. Thomas; second, Mary J. Gaylord, Des Moines.

Pair Woolen Mittens—First, P. O. Weaver.

Pair of Slippers, Hand Knit—First, M. J. Thomas; second, Ella Turnere.

Pair of Woolen Stockings, Hand Knit—First, E. Heydon.

Pair of Woolen Sox, Hand Knit—First, M. J. Thomas; second, Mrs. Art Shaw, Oskaloosa.

Ladies Sweater, Hand Knit—First, Mrs. H. P. Wandling, Des Moines; second, Mary J. Gaylord.

Pair of Golf Stockings, Hand Knit—Second, Mary J. Gaylord.

Ladies Knit Shawl—First, Ella Turnure; second, Mrs. H. P. Wandling.

Knitted Work Other Than Named—First, Ida Bradshaw, Payton; second, Mrs. Chas. D. Jarvis, Des Moines; third, Mrs. G. L. Aschan, Des Moines.

CROCHET.

Medallions (six)—First, Mary J. Bevan, Des Moines; second, Mrs. Jesse Alexander, Indianola.

Sweater—First, Anabel Beatty Smith; second, R. Thompson.

Filet Tidy—First, Mrs. A. E. Scruby, Des Moines; second, Anna Rinella, Iowa City.

Tray Mounted—Second, E. L. Thompson.

Basket—First, Mary Starcevich, Colfax; second, Ella Turnure.

Luncheon Set—First, E. L. Thompson; second, Mrs. J. P. McCormick, Ottumwa.

Pillow Cases, Trimmed with Crochet Edging or Insertion—First, Mrs. Art Shaw; second, Mrs. W. H. Wait, Leon.

Sheet, Crochet Trimming—First, Mrs. W. H. Wait; second, Mrs. Art Shaw.

Towel, Crochet Trimming—First, Mrs. I. L. Hillis, Des Moines; second, Mrs. L. G. Miller.

Turkish Towel, Crochet Trimming—First, Mrs. H. H. Barton, Des Moines; second, Mrs. Alice Mathis, Des Moines.

Collar—First, Mrs. A. F. Latcham, Des Moines; second, Maude Clement, Des Moines.

Collar and Cuff Set—Second, Louise Thomas, Des Moines.

Doily—First, Mary L. Bevan; second, Mrs. L. G. Miller.

Centerpiece—First, Mrs. A. H. Chiles, Carlisle; second, Anne M. Meyer.

Bag—First, Mrs. L. G. Miller; second, Francis B. Brunn, Des Moines.

Table Runner—First, Mrs. Jesse Alexander; second, Mrs. Frank McKee, Altoona.

Night Gown Yoke—First, Mrs. Huldah Manhanke, Pella; second, Mrs. Alice Mathis.

Corset Cover Yoke—First, Anabel Beatty Smith.

Linen and Crochet Centerpiece—First, Mrs. C. V. Brooks, Des Moines; second, Manila Abuhl, Ankeny.

Linen and Crochet Doilies (six)—Second, Anabel Beatty Smith.

Linen and Crochet Lunch Cloth—First, Mrs. C. F. Flanagan, Knoxville; second, Mrs. J. H. Freudenberg, Des Moines.

Shawl—First, Anabel Beatty Smith; second, Mrs. R. E. Chantry, Des Moines.

Cluny Scarf—First, Mary L. Bevan.

Cluny Centerpiece—First, Mary L. Bevan; second, Faye Johnson, Bondurant.

Cluny Yoke—First, Mary L. Bevan; second, Mrs. C. F. Flanagan.

Camisole—First, Lillian C. Mathis, Des Moines; second, Mrs. I. L. Hillis.

Hood—First, Mary Starcevich; second, Faye Johnson.

Pair of Infants Sox, Crochet—First, Mabel C. Luther; second, Mary J. Gaylord.

Slumber Robe, Crochet—First, Mrs. W. C. Raney.

Cotton Lace, Not Less Than One Yard—First, Faye Johnson; second, Mary L. Bevan.

Crochet Lace on Curtain, One Pair—First, Ella Turnure; second, Mrs. C. F. Flanagan.

Scarf—First, Mrs. Huldah Manhanke; second, Mary Jane Bennison.

Bedspread—First, Anna Rinella; second, Mrs. M. V. Dosh, Milford.

Specimen Work Other Than Named—First, Martha Gorgii, Des Moines; second, Mrs. G. L. Aschan; third, Mrs. John F. Liggett, Des Moines.

HAND NEEDLEWORK.

Envelope Combination Suit—First, R. Thompson.

Pillow Cases—First, E. Heydon; second, Mrs. F. L. Smalley, Des Moines.

Sheets—First, E. Heydon; second, A. L. Sarcone, Des Moines.

Bedspread—First, Ella F. Perkins; second, Anabel Beatty Smith.

Lady's Waist—First, R. Thompson; second, Mrs. Roy Kurtz, Carlisle.

Combination Suit—First, Anabel Beatty Smith; second, R. Thompson.

Night Dress—First, Floe Clark, Carlisle; second, Mrs. Arch Madden, Des Moines.

Night Shirt—First, Mrs. Arch Madden; second, James B. Stevens.

Children's Dress (neatest made)—First, Emma R. Roberts; second, Mrs. I. L. Hillis.

Underskirt—First, E. L. Thompson; second, Lois Shepherd, Altoona.

Corset Cover—Second, Bud Decker Smith.

Fancy Apron—First, Mrs. C. S. Sulser, Ankeny; second, Manila Abuhl.

Sofa Pillow—First, Mrs. Kate Smith, Des Moines; second, Ella F. Perkins.

Neatest Mended Garment—Second, Mrs. S. Stutsman.

Neatest Mended Glove—First, Mary A. McLennan.

Neatest Darned Stocking—First, Mrs. R. E. Frech, Des Moines; second, Mary A. McLennan.

Work Other Than Named—First, Mrs. M. A. Corrough; second, Mrs. H. H. Barton; third, E. L. Thompson.

WORK OF OLD LADIES.

Pair of Knit Wool Stockings—First, Mary J. Gaylord; second, E. Heydon.

Pair of Knit Wool Sox—First, Mary J. Gaylord.

Pair of Knit Wool Mittens—First, Ella Turnure; second, Mrs. W. C. Raney.

Pair of Knit Gloves—First, Mary J. Gaylord; second, Ella Turnure.

Bedspread—First, Mrs. A. A. Silcott, Valley Junction.

Neatest Darned Work, Any Article—First, Jane Adamson; second, Mrs. S. Stutsman.

Neatest Made Dress—First, Mrs. A. E. Eichenlaub; second, Mrs. Mary Christy, Des Moines.

Specimen Drawn Work—First, Mrs. C. W. De Long, Colfax; second, Mrs. W. C. Raney.

Specimen Outline Work—First, Mrs. M. A. Corrough; second, Ella Turnure.

Night Dress—First, Anne M. Meyer; second, Mrs. Frank E. Scott.

Specimen Crochet Work—First, Mrs. W. C. Raney; second, Mrs. C. W. De Long.

Comfort—Second, Mary A. McLennan.

Silk Quilt—First, Ella Turnure; second, Mary E. Barnes, Adelphi.

Cotton Quilt—First, Mrs. I. N. Aldrich, Waukee; second, Mrs. W. C. Raney.

Specimen of Hemstitching—Second, Mrs. S. Stutsman.

Specimen of Embroidery, Other Than Named—First, Mrs. Frank E. Scott; second, Mrs. A. Bongers; third, Mrs. C. W. DeLong.

Apron, Neatest Made—First, Mrs. S. Stutsman; second, Ella Turnure.

Specimen of Lace Work—First, Mrs. M. Bredimus; second, Mrs. S. Stutsman.

Silk Embroidery Sofa Pillow—First, Mrs. H. H. Barton.

Silk Embroidery Lunch Cloth—First, Mrs. M. A. Corrough; second, Mrs. Frank E. Scott.

Specimen Roman Embroidery—Second, Mrs. M. Bredimus.

Stocking Bag—Second, Anne M. Meyer.

Shopping Bag, Hand Made—First, Mrs. C. B. Burkhart, Altoona; second, Mary A. McLennan.

Tatting Handkerchief—First, M. S. Jones, Mitchellville; second, Mrs. W. C. Raney.

Work Other Than Named—First, Mrs. R. K. Dowell, Des Moines; second, Mrs. A. Bongers; third, Mrs. Peter Harmon, Polk City; fourth, Mrs. M. A. Rood, Des Moines.

LINEN OR COTTON EMBROIDERY.

Centerpiece, Twenty-two Inches or Larger—First, Mrs. Hildah Manhanke; second, Anne M. Meyer; third, Mrs. Wm. L. Scheel.

Handkerchief—First, Lula Robertson, Oskaloosa; second, Mabel C. Luther.

Pair of Pillow Cases—First, Mrs. W. H. Wait; second, Mrs. L. M. Hardin, Pleasantville; third, Mrs. Hildah Manhanke.

Six Doilies—First, Mrs. R. Beem, Pleasantville.

Six Napkins—First, Mrs. F. L. Armstrong, Des Moines; second, Mrs. Hildah Manhanke.

Dresser Scarf—First, E. Heydon; second, Anne M. Meyer.

Table Cloth—First, Mrs. Hildah Manhanke; second, Mrs. M. A. Corrough.

Sofa Pillow—Second, H. Trisler, Des Moines.

Sideboard Cover—First, Anne M. Meyer; second, Lois Hardin, Pleasantville.

Night Gown Yoke and Cuffs—First, Lula Robertson; second, Ida Bradshaw, Payton; third, Bud Decker Smith.

Baby Dress—First, Lula Robertson; second, Mrs. M. A. Corrough.

Lunch Cloth—First, Lois A. Beem, Pleasantville; second, Mrs. J. F. Fisher, Des Moines.

Pair of Towels—First, E. Heydon; second, Mary Jane Bennison.

Specimen Mount Mellick Embroidery—First, Anne M. Meyer; second, E. Heydon.

Specimen Wallachian Embroidery—Mrs. A. E. Eichenlaub; second, Mary Jane Bennison.

Specimen Eyelet Embroidery—First, Anna Rinella; second, Anne M. Meyer.

Specimen Coronation Embroidery—First, Ella F. Perkins; second, Mary Jane Bennison.

Bed Set—First, Anna Rinella; second, Mrs. C. Stream, Des Moines.

Work Other Than Named—First, A. S. Marquis, Colfax; second, E. Heydon; third, Mabel C. Luther.

SILK EMBROIDERY IN COLORS.

Lunch Cloth Conventional—First, Mrs. E. N. Meyer, Des Moines.

Piano Cover—First, Merle McHone Price, Des Moines.

Centerpiece Any Design—First, Velda Wilbarn, Altoona; second, Mrs. E. N. Meyer; third, Cora Wickershiem, Des Moines.

Tray Cloth—Second, Anne M. Meyer.

Sofa Pillow—First, Merle McHone Price; second, Mrs. Nevada Hamilton, Des Moines.

Six Doilies—First, Mrs. A. E. Eichenlaub; second, Mrs. S. Stutsman.

Camisole—First, Mrs. C. Stream; second, Mrs. Frank E. Scott.

Work Other Than Named—First, James B. Stevens; second, Ella Turnure; third, Ida Bradshaw.

WHITE SILK EMBROIDERY.

Tray Cloth—First, Bud Decker Smith; second, Mrs. A. E. Eichenlaub.

Child's Flannel Skirt—First, Ella F. Perkins; second, James B. Stevens.

Infant's Shawl—First, James B. Stevens.

Infant's Cap—First, James B. Stevens.

Work Other Than Named—First, Mrs. F. L. Armstrong; second, Mrs. C. J. Susong, Des Moines; third, Mrs. C. Stream.

ROMAN EMBROIDERY.

Centerpiece—First, Anne M. Meyer.

Sideboard Cover—First, Anne M. Meyer.

Work Other Than Named—First, Anne M. Meyer.

CROSS-STITCH EMBROIDERY.

Sofa Pillow—First, L. G. Miller; second, Mary Jane Bennison; third, Anne M. Meyer.

Centerpiece—First, L. G. Miller; second, E. Heydon.

Scarf—First, Mrs. H. D. Case, Des Moines.

Table Cover—First, Mary Jane Bennison; second, Mrs. H. D. Case.

Bag—First, Mrs. H. D. Case; second, L. G. Miller.

Pair of Towels—First, E. L. Thompson; second, Mrs. H. D. Case.

Luncheon Set—First, E. Heydon; second, Mrs. C. Stream.

Work Other Than Named—First, Mrs. H. D. Case; second, E. L. Thompson.

PUNCH EMBROIDERY.

Night Gown—First, Bud Decker Smith.

Centerpiece—First, Ferne Botsford; second, Bud Decker Smith.

Pillow Cases—Second, Bud Decker Smith.

Scarf—Second, Bud Decker Smith.

Towels—First, Ida Bradshaw.

Work Other Than Named—First, M. S. Jones.

HARDANGER EMBROIDERY.

Lunch Cloth—First, Mrs. E. N. Meyer.

Dresser Scarf—First, Signe Strandell; second, Bud Decker Smith.

Centerpiece—First, Mrs. E. N. Meyer; second, Bud Decker Smith; third, L. G. Miller.

Sofa Pillow—First, Etta Swanson, Des Moines; second, Bud Decker Smith.

Bag—First, L. G. Miller; second, Ida Bradshaw.

Sideboard Cover—First, Signe Strandell; second, Bud Decker Smith.

MLLE FLEUR.

Scarf—First, Ella F. Perkins.

Six Doilies—Second, Mary J. Gaylord.

Work Other Than Named—Second, Ella F. Perkins.

MEXICAN EMBROIDERY AND DRAWNWORK, HAND MADE.

Carver's Cloth—Second, M. S. Jones.

Six Napkins—First, E. Heydon; second, Bud Decker Smith.

Table Cloth—First, Mrs. W. H. Wait; second, E. Heydon.

Handerchief—First, M. S. Jones.

Pair Towels—Second, Mrs. Lizzie Ritzinger.

Centerpiece—Second, Mrs. W. H. Wait; third, M. S. Jones.

Tray Cloth—Second, M. S. Jones.

Towel Weaving—Mrs. J. W. Patrick.

Pillow Cases—Second, Bud Decker Smith.

Child's Hemstitched Dress—Second, Mrs. Lizzie Ritzinger.

Work Other Than Named—Second, Mrs. J. W. Winegardner; third, M. S. Jones.

IRISH CROCHET.

Best Trimmed Shirt Waist—First, R. Thompson; second, E. L. Thompson.

Dresser Scarf—First, E. L. Thompson.

Bag—First, Mrs. Jesse Alexander; Mrs. I. L. Hillis.

Collar—First, Mrs. F. W. Moss, Des Moines; second, R. Thompson.

Collar and Cuffs—First, R. Thompson; second, E. L. Thompson.

Yoke—First, Mrs. I. L. Hillis; second, M. S. Jones.

Infant's Cap—First, Mrs. Geo. Diebel, Des Moines; second, Ella Turnure.

Doilies—Second, Floe Clarke.

Jabot—First, Mary L. Bevan; second, E. L. Thompson.

Work Other Than Named—First, Mary L. Bevan; second, E. L. Thompson; third, R. Thompson.

POINT LACE.

Handkerchief—First, Mrs. R. K. Dowell; second, Mary Jane Bennison.

Collar and Cuff Set—First, Anne M. Meyer.

Infant's Cap—First, Dr. C. F. Spring, Des Moines; second, Mrs. R. K. Dowell.

Tie Ends—First, M. S. Jones.

Work Other Than Named—First, Mrs. W. H. Wait.

TATTING.

Edging and Insertion One Yard—First, Almeda Freel, Pleasantville; second, Mrs. C. Stream.

Handkerchief—First, Signe Strandell; second, Mrs. E. N. Meyer.

Tie Ends or Jabot—First, Mrs. A. Bongers; second, Faye Johnson.

Infant's Cap—First, Almeda Freel; second, Faye Johnson.

Tatting Bag—First, Ella Turnure; second, Mrs. C. L. Wiebern, Altoona.

Towel Trimmed With Tatting—First, Almeda Freel.

Apron Trimmed With Tatting—First, Mrs. A. Bongers; second, Mrs. C. L. Wilbern.

Centerpiece—First, Delia B. Meredith, Des Moines; second, Signe Standell.

Pillow Cases Trimmed With Tatting—First, Delia B. Meredith; second, Almeda Freel.

Tatting Yoke—First, Nora Burgess; second, Eva Horsman, Beech.

Corset Cover Trimmed With Tatting—First, Lucille Johnson, Polk City; second, Mabel C. Luther.

Table Runner—First, Mrs. C. F. Flanagan.

Piano Scarf—First, Mrs. B. O. Spahr, Slater.

Sofa Pillow—First, Mrs. C. E. Winehart, Des Moines.

Collar—First, Ella Turnure.

Work Other Than Named—First, Mrs. J. W. Ashton, Fort Dodge; second, Delia B. Meredith.

ARTS AND CRAFTS.

Bead Chain—First, Ella Turnure; second, M. S. Jones.

Bead Purse—First, Mrs. W. C. Raney; second, Ada Borre Newquist.

Bead Belt—First, Mrs. H. H. Barton; second, M. S. Jones.

Raffia Basket—First, Mrs. W. C. Raney; second, Mrs. A. Bongers.

PROFESSIONAL LIST HAND PAINTED CHINA.

Best Collection—First, Mrs. Wm. Stephenson, Des Moines; second, Mrs. Alice Seymour, Des Moines.

Vase Over Twelve Inches—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour; third, Mrs. E. S. Root, Des Moines.

Water Pitcher—First, Mrs. Wm. Stephenson; second. Mrs. Alice Seymour.

Smoker's Set—First, Mrs. W. H. Lyon, Knoxville; second, Mrs. Wm. Stephenson.

Dresser Set (three pieces or more)—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Bon-Bon Box (Covered)—First, Mrs. Wm. Stephenson; second, Mrs. W. H. Lyon; third, Mrs. Alice Seymour.

Sugar and Creamer—First, Mrs. W. H. Lyon; second, Mrs. Wm. Stephenson; third, Mrs. Alice Seymour.

Serving Tray—First, Mrs. Alice Seymour; second, Mrs. Wm. Stephenson; third, Mrs. W. H. Lyon.

Set of Plates (Eight Inches or More)—First, Mrs. W. H. Lyon; second, Mrs. Alice Seymour; third, Mrs. Wm. Stephenson.

Candlestick—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Tea Pot—First, Mrs. W. H. Lyon; second, Mrs. Alice Seymour.

Open Bon-Bon—First—Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Bread or Cake Plate—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Whipped Cream Bowl—First, Mrs. Alice Seymour; second, Mrs. W. H. Lyon.

Coffee or Chocolate Pot—First, Mrs. Alice Seymour.

Fancy Cup and Saucer—First, Mrs. Alice Seymour; second, Mrs. W. H. Lyon.

Decorated Tile—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Chop Plate—First, Mrs. W. H. Lyon; second, Mrs. Wm. Stephenson.

Bread and Butter Plates (six inches)—First, Mrs. W. H. Lyon; second. Mrs. Alice Seymour; third, Mrs. Wm. Stephenson.

Olive or Pickle Dish—First. Mrs. Alice Seymour; second, Mrs. Wm. Stephenson.

Marmalade Jar and Plate—First, Mrs. Alice Seymour.

Nut Bowl (six individual bowls)—First, Mrs. Alice Seymour.

Radish Tray—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Syrup Pitcher—First, Mrs. Wm. Stephenson; second. Mrs. Alice Seymour.

Bread and Milk Set—First, Mrs. Alice Seymour.

Cheese Plate—First, Mrs. Alice Seymour; second, Mrs. Wm. Stephenson.

Salad Bowl—First, Mrs. Alice Seymour; second. Mrs. W. H. Lyon.

Fruit Bowl—First, Mrs. W. H. Lyon; second, Mrs. Alice Seymour; third. Mrs. Wm. Stephenson.

Standard or Footed Compote—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Relish Set—First, Mrs. Alice Seymour.

Set Fruit Plates—First, Mrs. W. H. Lyon; second, Mrs. Alice Seymour; third, Mrs. Wm. Stephenson.

Card Receiver—First. Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Vase Under Twelve Inches—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour; third, Mrs. E. S. Root.

Tumbler Coasters—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Milk Pitcher—First, Mrs. Alice Seymour.

Guest Room Set—First, Mrs. Alice Seymour.

Talcum Shaker—First, Mrs. Alice Seymour; second. Mrs. Wm. Stephenson.

Tea Pot Stand—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Tea Caddy—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Ice or Butter Tub—First, Mrs. Wm. Stephenson.

Fernery—First, Mrs. Wm. Stephenson; second, Mrs. Alice Seymour.

Original Conventional Design for Plates Ten Inches—First, Mrs. Alice Seymour; second, Mrs. Wm. Stephenson.

Other Than Named—First, Mrs. E. S. Root; second, Mrs. Alice Seymour; third, Mrs. Wm. Stephenson.

AMATEUR LIST—HAND PAINTED CHINA.

Best Collection—First, Mae Goodbarn, Des Moines; second, Mrs. Lake Bower, Des Moines; third, Ella F. Perkins.

Chocolate Pot—First, Ella F. Perkins; second, Eugenia Propst, Des Moines; third, Anna E. Shettle, Des Moines.

Comb and Brush Tray—First, Ella F. Perkins; second, Mrs. Lake Bower; third, Mrs. D. B. Gilchrist, Des Moines.

Perfume Bottle—First, Mrs. Lake Bower; second, Anna E. Shettle.

Spoon Tray—First, Mae Goodbarn; second, S. P. Pascoe, Des Moines.

Tea Pot—First, Ella F. Perkins; second, Anna E. Shettle.

Six Plates (Eight Inches or More—First, Mrs. D. B. Gilchrist; second, Edith V. Brownlie, Des Moines; third, Mrs. C. C. Sherlock, Des Moines.

Bread and Milk Set—First, Anna E. Shettle; second, Mrs. Lake Bower.

Relish Set—First, Ella F. Turnure; second, Anna E. Shettle.

Sugar and Creamer—First, Edith V. Brownlie; second, Mrs. C. C. Sherlock; third, Mae Goodbarn.

Loaf Sugar Holder—First, Mrs. Lake Bower; second, Anna E. Shettle.

Vase Over Ten Inches—First, Mae Goodbarn; second, Mrs. C. C. Sherlock; third, Mrs. Lake Bower.

Vase Under Ten Inches—First, Mae Goodbarn; second, Mrs. Lake Bower; third, Anna E. Shettle.

Decorated Tile—First, Mrs. Lake Bower; second, Mae Goodbarn.

Set Cups and Saucers—First, Mrs. D. B. Gilchrist; second, Edith V. Brownlie; third, Ella F. Perkins.

Rose Bowl or Flower Holder—First, Edith V. Brownlie; second, Ella F. Perkins; third, Anna E. Shettle.

Covered Bon-Bon—First, Mae Goodbarn; second, Mrs. Lake Bower; third, Anna E. Shettle.

Olive Dish—First, Mae Goodbarn; second, Mrs. Lake Bower.

Desk Set—First, Anna E. Shettle.

Marmalade Jar and Plate—First, Mrs. Lake Bower; second, Ella F. Perkins.

Candlestick—First, Edith V. Brownlie; second, Anna E. Shettle.

Nut Bowl—First, Mae Goodbarn; second, Mrs. Lake Bower; third, S. P. Pascoe.

Mayonnaise Bowl—First, Mae Goodbarn; third, Mrs. Lake Bower.

Pitcher (Water or Lemonade)—First, Mrs. Lake Bower; second, Mae Goodbarn; third, S. P. Pascoe.

Tobacco Jar—First, Anna E. Shettle.

Syrup Pitcher—First, Mrs. Lake Bower; second, Mae Goodbarn.

Tumbler Coasters—First, Anna E. Shettle.

Guest Room Set—First, Mae Goodbarn; second, Anna E. Shettle.

Open Bon-Bon—First, Mae Goodbarn; second, Mrs. Lake Bower.

Chop Plate—First, Edith V. Brownlie; second, S. P. Pascoe.

Cake Plate—First, Mrs. C. C. Sherlock; second, S. P. Pascoe.

Fernery—First, Mae Goodbarn.

Bread and Butter Plates (Six Inches)—First, Mrs. Lake Bower; second, Ella F. Perkins; third, Mrs. D. B. Gilchrist.

Fruit Set (Bowl and Six Plates)—First, Ella F. Perkins; second, Mrs. Lake Bower; third, Anna E. Shettle.

Other Than Named—First, Edith V. Brownlie; second, Mrs. Lake Bower.

HAND PAINTED CHINA.

Vase Under Twelve Inches—First, R. Chester Hill, Des Moines.

Set Bread and Butter Plates—First, R. Chester Hill; second, Helen Breston, Avon.

Olive or Pickle Dish—First, R. Chester Hill.

Open Bon-Bon—First, R. Chester Hill.

Bread or Cake Plate—First, R. Chester Hill.

Water Pitcher—First, R. Chester Hill.

Coffee or Tea Pot—First, R. Chester Hill.

Set Fruit Plates—First, R. Chester Hill.

Sugar and Creamer—First, R. Chester Hill.

Candlestick—First, R. Chester Hill.

Cup and Saucer—First, R. Chester Hill.

Syrup Pitcher—First, R. Chester Hill.

Jardiniere—First, R. Chester Hill.

Other Than Named—First, R. Chester Hill.

GRAPHIC AND PLASTIC ARTS.

Oil Painting—First, Harriet Macy, Des Moines; second, Catherine N. McCarthney, Iowa City; third, Claude A. Patterson, Des Moines; fourth, Lillian Geister, Primghar.

Water Color Painting—First, Edith Bell, Des Moines; second, Catherine N. Mc Carthney; third, Lawrence O. Stewart, Des Moines; fourth, Alice Mc Kee, Des Moines.

Black and White or Monochrome Drawing—First, Alice McKee; second, Kate Kuth Van Duzee, Dubuque; third, Edna Patzig, Des Moines; fourth, Marshall Scott, Des Moines.

Posters of a Pictorial or Decorative Design—First, Theodora Aulmann, Des Moines; second, Gladys Corbett, Griswold; third, Harriet Macy; fourth, Claude A. Patterson.

Collection of Not Less Than Six or More Decorative Designs Other Than Pictorial—First, Theodora Aulmann; second, Jennie Coventry, Des Moines; third, Gladys Corbett; fourth, Claude A. Patterson.

JUNIOR CLASS

Oil Painting—First, Frances Price, Des Moines; third, Harold Oldfield, Des Moines

Water Color Painting—First, Belle Ferne Scott, Bondurant; second, Frances Price.

Black and White or Monochrome Drawing—First, Frances Price; second, Mildred Mae Scott, Bondurant; third, Belle Ferne Scott.

Collection of Not Less Than Six Original Decorative Designs Other Than Pictorial—First, Frances Price; second, Belle Ferne Scott.

BABY HEALTH DEPARTMENT

Babies From Rural Districts.

Boy Twelve Months and Under Twenty-four Months—First, James Walter Young, 94.7, Charles Young, Ankeny, Iowa; second, James W. Judkin, 94.5, Mrs. Berle Judkin, Indianola, Iowa; third, Ethan E. Rutenback, 94.0, E. Rutenback, Lost Nation, Iowa; fourth, Richard A. Reece, 90.2, Mrs. R. A. Reece, Des Moines, Iowa.

Boy Twenty-four Months and Under Thirty-six Months—First, Oris Bradshaw, 93.9, John A. Bradshaw, Dana, Iowa; second, Kenneth W. Decker, 92.6, A. Decker, Adelphi, Iowa; third, Otto Warner, 91.2, O. R. Warner, Bloomfield, Iowa; fourth, Bernard Mahaffa, 88.2, Walter Mahaffa, Waukee, Iowa.

Girl Twelve Months and Under Twenty-four Months—First, Janice Judkin, 94.1, M. W. Judkin, Earlham, Iowa; second, Judith Judkin, 93.8, M. W. Judkin, Earlham, Iowa; third, Doris Olander, 93.2, A. J. Olander, Des Moines, Iowa; fourth, Catherine McConnell, 93.1, Horace McConnell, Waukee, Iowa.

Girl Twenty-four Months and Under Thirty-six Months—First, Florence Norris, 95.0, E. F. Norris, Prairie City, Iowa; second, Elizabeth Seeger, 94.1, L. F. Seeger, Glenwood, Iowa; third, Gail Gifford, 89.2, C. A. Gifford, Altoona, Iowa; fourth, Delma Snyder, 88.0, Alvin Snyder, Des Moines, Iowa.

Babies From Cities and Towns Less Than Ten Thousand.

Boy Twelve Months and Under Twenty-four Months—First, Frederick Armstrong, 95.2, Della M. Armstrong, Orient, Iowa; second, Gerald Cornwell, 94.2, C. L. Cornwell, Ankeny, Iowa; third, Edward Foster, 94.1, Mrs. E. Foster, Marshalltown, Iowa; fourth, William D. Krappel, 93.0, W. R. Krappel, Centerville, Iowa.

Boy Twenty-four Months and Under Thirty-six Months—First, John Pennington, 95.8, Dr. O. J. Pennington, Dexter, Iowa; second, Meyer Pennington, 95.6, Dr. O. J. Pennington, Dexter, Iowa; third, Durwood J. Smith, 95.2, Harry P. Smith, Newton, Iowa; fourth, John Lauder, 95.0, C. H. Lauder, Grinnell, Iowa.

Girl Twelve Months and Under Twenty-four Months—First, Phyllis Flandermeyer, 91.5, P. W. Flandermeyer, Huxley, Iowa; second, Marjorie Nelson, 91.3, G. N. Nelson, Cambridge, Iowa; third, Mary Pooley, 91.2, Roy J. Pooley, Greene, Iowa; fourth, Dorothy Hick, 91.0, Ora Hick, Altoona, Iowa.

Girl Twenty-four Months and Under Thirty-six Months—First, Louise Kinnick, 98.3, F. B. Kinnick, Adel, Iowa; second, Jean Macklin, 93.9, W. E. Macklin, Coon Rapids, Iowa; third, Mary Hall, 93.0, R. W. Hall, Weldon, Iowa; fourth, Mary Erwin, 90.0, A. W. Erwin, Cambridge, Iowa.

Babies From Cities Over Ten Thousand.

Boy Twelve Months and Under 24 Months—First, John Peck, 97.9, Dr. John H. Peck, Des Moines, Iowa; second, Richard Enwyl, 95.7, Mrs. R. M. Anwyl, Des Moines, Iowa; third, Walter Rogers, 95.6, B. E. Rogers, Des Moines, Iowa; fourth, Dirk Barrett, 95.3, E. G. Barrett, Des Moines, Iowa.

Boy Twenty-four Months and Under Thirty-six Months—First, Richard Swan, 96.8, Mrs. Fred Swan, Des Moines, Iowa; second, Warren Sargent, 96.7, A. E. Sargent, Des Moines, Iowa; third, Patrick Farrell, 96.2, Joseph E. Farrell, Des Moines, Iowa; fourth, Joe Faupel, 96.1, Mrs. H. K. Faupel, Des Moines, Iowa.

Girl Twelve Months and Under Twenty-four Months—First, Dolores C. Michils, 95.9, Mrs. Fred M. Michils, Des Moines, Iowa; second, Maxine Bellew, 95.2, G. Earl Ballew, Des Moines, Iowa; third, Ruth Headlee, 94.9, Homer Headlee, Des Moines, Iowa; fourth, Cloris Bell, 94.6, Mrs. F. C. Bell, Des Moines, Iowa.

Girl Twenty-four Months and Under Thirty-six Months—First, Dorothy Rowe, 96.1, George L. Rowe, Des Moines, Iowa; second, Mary Isbell, 96.0, Albert Isbell, Des Moines, Iowa; third, Polly Towne, 95.9, George L. Towne, Des Moines, Iowa; fourth, Marguerite Sherman, 95.0, F. Roy Sherman, Des Moines, Iowa.

CHAMPIONSHIPS.

Most Perfect Girl Twelve Months to Thirty-six Months—Louise Kinnick, 98.3, F. B. Kinnick, Adel, Iowa.

Most Perfect Boy Twelve Months to Thirty-six Months—John Peck, 97.9, Dr. John H. Peck, Des Moines, Iowa.

IMPROVEMENT CLASS.

SCORE REPRESENTS 1919 GAIN.

BABIES FROM CITIES AND TOWNS LESS THAN TEN THOUSAND.

Boy Twenty-four Months and Under Thirty-six Months—First, Meyer Pennington, 1.3, Dr. O. J. Pennington, Dexter, Iowa; second, John Pennington, 1.2, Dr. O. J. Pennington, Dexter, Iowa; third, Durwood J. Smith, 0.3, Harry P. Smith, Newton, Iowa.

Girl Twenty-four Months and Under Thirty-six Months—First, Louise Kinnick, 3.4, F. B. Kinnick, Adel, Iowa.

BABIES FROM CITIES OVER TEN THOUSAND.

Boy Twenty-four Months and Under Thirty-six Months—First, Kenneth Rank, 3.4, M. H. Rank, Des Moines, Iowa.

Girl Twenty-four Months and Under Thirty-six Months—First, Marguerite Sherman, 5.5, F. Roy Sherman, Des Moines, Iowa; second, Dorothy Wiedenman, 1.9, H. T. Wiedenman, Des Moines, Iowa; third, Dorothy Rowe, 1.0, George L. Rowe, Des Moines, Iowa; fourth, Dorothy Dolan, 0.9, Dow D. Dolan, Des Moines, Iowa.

CHAMPIONSHIPS.

Boy Showing Greatest Improvement Over Last Year—Kenneth Rank, 3.4, M. H. Rank, Des Moines, Iowa.

Girl Showing Greatest Improvement Over Last Year—Marguerite Sherman, 5.5, F. Roy Sherman, Des Moines, Iowa.

IOWA STATE FAIR BEATS ALL RECORDS

From Farmer and Breeder, Sioux City, Iowa.

It will be no surprise to our readers to learn by the printed word (unless they first made the discovery by personal acquaintance) that the Iowa State Fair which was held at Des Moines, August 20th to 29th, inclusive, far outstripped any previous session. During the war the fair strove to keep alive that spirit of progressiveness that characterizes the Middle West. In those years attendance was lessened and exhibits fell off, owing to the fact that the entire nation was keyed up to the highest pitch of production. With production foremost in the public mind, it was but natural that all the great agricultural fairs and expositions should register below normal. That they made as good a showing as they did is to their credit.

But since the last fair season history has recorded some tremendous pages. Chief of these is the end of the war with victory for the cause of justice and peace. The big rural shows this year are called "Victory" Fairs in commemoration of the great event. And well may they thus mark this new step in the march of progress and of civilization. For it was "food that won the war," and the farmers of this land, who rallied to the call for increased production, helped to win the battle that our brave boys fought in the trenches of Flanders and of France.

The Iowa State Fair is always a victory fair—itself a record of new achievements in the struggles for success against all manner of odds. In the center of the greatest agricultural region on the globe, in a state whose arable land is 95 per cent of its total area, with agriculture the dominant note throughout the length and breadth of the Hawkeye state, there is perhaps no other exposition of its kind that equals and surely none that excels what is year by year "the carnival of the land of plenty."

But this year they held at Des Moines the biggest and best fair ever before recorded. For the first time all the spaces given over to machinery exhibits were filled to overflowing, and virtually all available outdoor space was taken up with the tents and exhibits of manufacturers and distributors who are making the most of this period of activity when reconstruction is taking the place of destruction.

Not only were the exhibits of machinery, implements, appliances, and such like far in excess of anything hitherto seen at the Iowa State Fair, but the live stock exhibits especially were the largest on record.

All of the swine pens, some 1,100 in number, were filled and hogs were shown in old sheep pens and in tents nearby—a thing that never happened before. Of hogs there were 3,197 on exhibition, the general quality of which was at least up to that of former years.

On this point it is well to remember that as a general proposition, there is not a noticeable improvement in the champion hogs shown every year. Some remarkably good hogs of all the popular breeds have been sent to the large agricultural fairs and expositions for a good many years. Improvement is along the line of widening interest in pure-bred swine rather than in the actual approach towards perfection of any single animal. Type changes, to be sure, as the years run on, to meet changing needs. The small, compact, showy types have been largely superseded by what is known as "big type," in response to an economic demand for hogs that will attain great size when fed out long enough, or that will procreate young that will mature quickly and grow into desirable market weights at six to eight months.

Many of the older breeders divided honors this year with the younger ones who are just getting into the game. Almost universal was the word that "they had nothing to complain of in the hog business." The lowest mortality from hog cholera on record (41 in 1,000 in the state of Iowa) has helped to encourage the more extensive growing of pure-bred animals. We frankly set down here our belief that before many years practically all Iowa farmers will be raising pure-bred hogs—if not actually registered, then virtually "thoroughbred" by the continued use of pedigreed boars and the selection of outstanding sows for reproduction.

In the beef cattle classes all of the prominent breeds, for which not only Iowa, but the adjoining states are noted, were represented by strings of high-class animals that shed glory on the breeding profession and did credit to the fair management in inducing such an ample display of the best in this line. In quality and finish these cattle were possibly a little above those shown in the past two years, and the number of entries excelled that of last year. Breeders have enjoyed good sales and high prices for the past several years and most of them declared their entire satisfaction with the general situation. The outlook as indicated by the exhibits at the state fair and at other fairs, and by the tone of the business trade generally, is for a continuance of profitable business for several years to come.

The dairy cattle were of such numbers and quality to indicate the increasing interest in dairying in this section. One of the most valuable features of the dairy exhibit was the cow testing exhibit under the auspices of the Ames Agricultural College, in which individual records revealed the fact that you can't most always sometimes tell what a cow can or will do by way of performances merely by her outsides. The only certain method is to weigh and Babcock test the milk of every cow on the place. This should be done often enough to get a line on her output during an entire year, after which it will be in order to hand out the medals where they belong and to dismiss to the cannery those who fail to come across with the price of keeping plus a fair profit to the owner.

The sheep pens were fairly well filled and an increasing number of milch goats attracted the attention of the curious. Poultry in increasing numbers were entered, some 500 fowls being required to exhibit their charms outside the regular poultry building.

Even the horse exhibit was better than might be expected in these days when horse breeding is something of an uncertain quantity. The heavy draft classes made a very creditable showing, some of the most prominent studs from the middle and western states being shown.

Perhaps the most conspicuous feature of the fair this year was the remarkably large attendance. Farmer and Breeder had been urging "everybody to go" and it looked as though all the folks had taken our advice. Even in the early days of the session, large crowds took advantage of the fine weather to congregate on the grounds for general and special sightseeing. All former records of attendance and money receipts were broken at the 1919 fair and if the crowds continue to increase, with Iowa's growing richness and productivity, the state board of agriculture will have to enlarge the grounds and add more buildings.

This year there was a total attendance of 406,000 people during the nine days of the fair's duration. The total receipts were $310,000 and the net profits were $70,000, as reported by Secretary A. R. Corey at the close of the fair.

The weather during the entire period of ten days was just about ideal. It wasn't too hot and it wasn't chilly and disagreeable as it sometimes is the last week in August. The good roads enabled thousands of farmers to motor direct from the old homestead right into the fair grounds where ample provision had been made for camping parties to pitch their tents and stay as long as they liked. Many brought along their own eatables and some filled their larder from the groceries or eating stands on the grounds. This phase of seeing the fair is likely to grow to unheard-of proportions, as the auto and good roads become more and more vital factors in rural life.

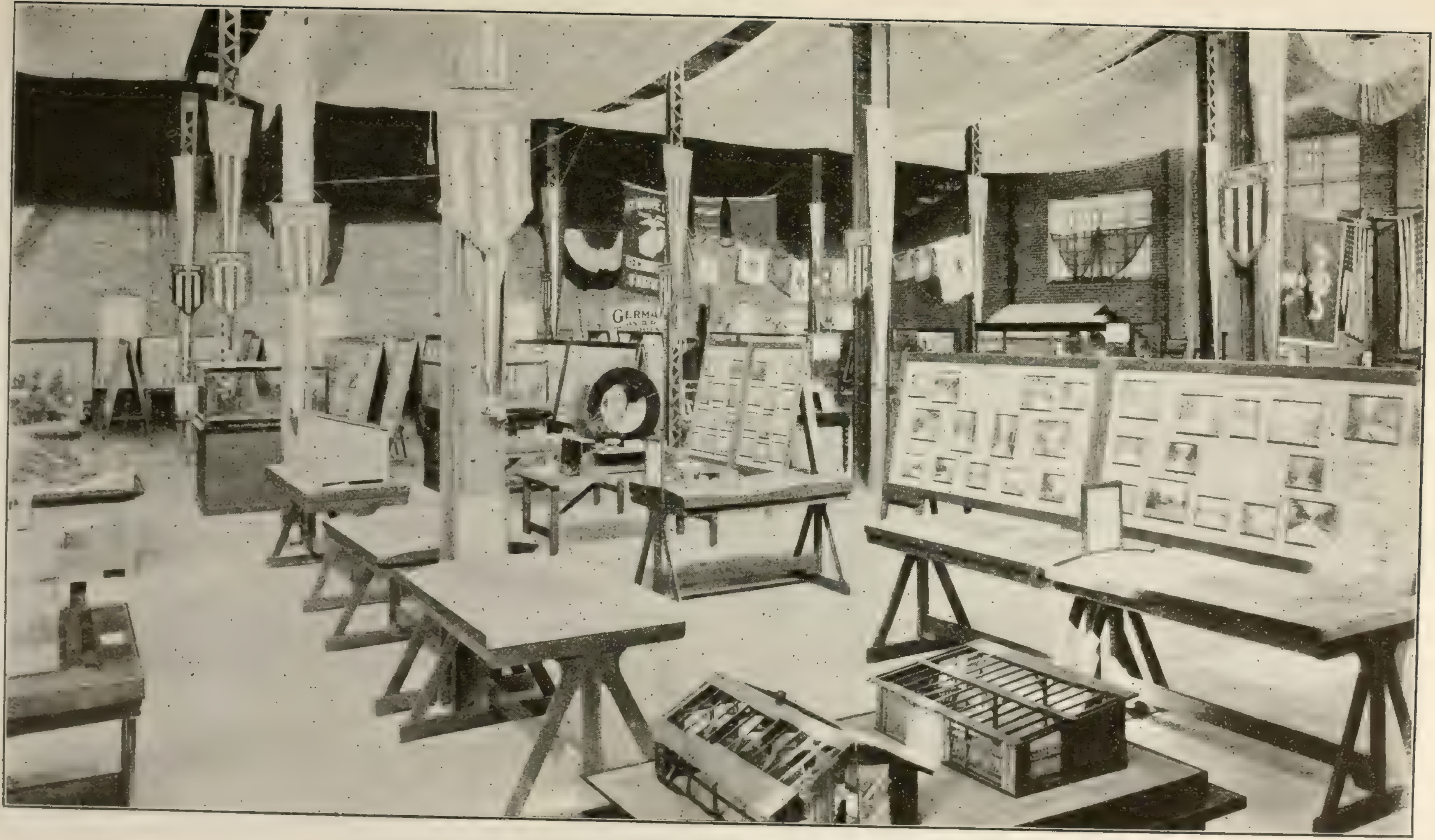
IOWA'S GREAT FAIR BREAKS ALL RECORDS.

From the Iowa Farmer.

The greatest in the history of the organization is the record made at this year's fair and exposition. The attendance surpassed that of all previous fairs and the exhibits from farm and factory surpassed any similar exhibit ever held in the United States. No place in the world ever exhibited such an array of high-class animals and the display of products from the farm, orchard and garden are nowhere surpassed. Liberal premiums were not alone responsible for the great display, but rather a patriotic zeal which prompted the exhibition of the wonderful products of a most seasonable crop year. People wanted the world to know what they had accomplished and so they brought the choice products from all sections of the state and made a display that is seldom equaled.

The total attendance at the Iowa State Fair this year was 406,185. Last year the attendance ws 324,000. The receipts last year were $251,196.62. This year the receipts were $301,243.51. The society expects to make about $60,000 clear. Already plans are being made for the future. The last legislature appropriated $200,000 for a great cattle barn and this will be commenced at once, plans already having been secured. A new poultry house and a suitable place for the flower exhibit are some of the things badly needed and will come in time.

A shortage of farm labor and a great need of additional man power on the farm caused an unusual interest in the exhibition of labor-saving devices of all kinds. Farmers feel the need of machinery that will enable a greater output from the energy expended. Inventive skill has come to the rescue in a large way and this was clearly in evidence at the state fair. More people, men and women, visited the machinery section than ever before. The western part of the grounds was devoted to a wonderful display of tractors, threshers, harvesters, elevators, silo equipment, plows, and all of the latest power equipment. When all of this machinery was in operation there was a great opportunity to study the various devices and to form an estimate of action and service. All types and designs in silo construction gave interested observers a good insight into construc-



UNITED STATES GOVERNMENT EXHIBIT, 1919 STATE FAIR tion and equipment. Boys and girls were running some of the big tractors, the object being to show their simplicity of management and control.

The exhibits made by farm bureaus from several counties created a keen rivalry and interest and the variety of farm products on exhibition was a revelation to those city folks who had in mind only corn, wheat, oats and a few other staples. Hundreds of different crop products were displayed and the manner of exhibiting them showed much skill and resourcefulness. The county agents were on duty and gave needed information about their exhibits and about the counties represented. A book for registration was available and people had an opportunity of knowing who was at the fair from that particular section. The county agents and farm bureau representatives held a great meeting in the large tent and a number of addresses were delivered by men of state and national reputation. A free-for-all discussion upon practical themes afforded all an opportunity to take part in the deliberations.

One of the real big features at every fair is the stock parade. It was estimated that over a million dollars was represented and those who had seen the animals on exhibition in their stalls or in the judging ring had an opportunity of seeing them in action. It is doubtless true that a better display of blooded animals was never assembled at any other place on earth. People from adjoining states, and from remote sections, some from Canada and some from South America were amazed at the magnitude of the exhibit. One thing that was especially noteworthy was the interest taken in the fine display of horses. In the past America has looked to France, England and Belgium for its high-class breeding stock; now those countries must look to America. The indications are that there will be a marked stimulus in the horse industry and it was plainly to be seen at this great fair that Iowa is prepared to do its share in providing blooded animals for export. The hog exhibit was the greatest in the history of the country. There were nearly 5,000 animals on exhibition and every type known to breeders was represented. Hog experts declare that it would not be possible to duplicate the exhibit in any other state in the Union. A few years ago it did not require much space for the sheep exhibit. When the management wanted a building especially for sheep it was freely stated that Iowa is not a sheep state, but the exhibits in recent years have discounted the statement. The great sheep pavilion was taxed to the limit. Something out of the ordinary was the exhibit of milk goats and these attracted unusual attention. The cattle exhibit has never been surpassed at this or any other fair.

One of the really big features at the fair is that under the control of the women. The best investment Iowa ever made was when an appropriation was made some years ago for the construction of the Woman's Building. Here are held child welfare meetings, baby contests, sanitary exhibits with lectures and information. Domestic science experts are on duty all the time and fine arts, household necessities and a miscellaneous display of various kinds make this a really attractive place for both men and women. Lectures, entertainments and technical discussions afford a great educational feature for the thousands who attend. The exhibits from the various canning clubs and the demonstrations by girls who have participated in the work in their home communities gave the young people a great opportunity for observation and study. Iowa's great college at Ames as usual had a display and gave demonstrations and lectures that drew thousands and the various displays excited a lively interest.

The amusement and entertaining features were of a high order and drew immense crowds to the grand stand. In fact, thousands were turned away because there was no room for them. This suggests an enlargement of the amphitheater before many years. The various attractions in different buildings and on the grounds afforded everybody diversion and variety. There is still a widespread interest in horse racing, and while no horses of wide fame were on the turf, nevertheless local interest centered in some of the best steppers and there was much vigorous shouting from the grand stand as their favorite animal nosed a little ahead as she came under the wire. The automobile races created much exciting interest. There is enough of the dare-devil spirit manifested in such a contest to develop acute interest in the outcome of races and the element of danger adds to the popularity of such races. The midway stunts, the entertaining features in the stock pavilion and the exhibitions in the air by daring birdmen, together with the great display of fireworks at night, made the occasion one of intense interest.

It is estimated that 20,000 people camped upon the grounds this season. About 100 acres of wooded tract was given over to this feature and the delightful weather made this a real enjoyable way of seeing the big fair. The members of the several boys' clubs were fitted out in large tents and they thoroughly enjoyed the innovation. The social side of the fair was one of its strong points. People from all sections of the state met in friendly spirit and cheerful mood and there was good nature and kindly consideration on every hand. It mattered not how badly people were discommoded, they maintained a sweet spirit and a cheerful composure. There were a larger number of automobiles in the grounds than ever before assembled at any function in the Middle West. The newly acquired ground north of the race track, which afforded a landing place for airplanes, proved a popular provision, as several flyers from different sections of the state came by the air route.

The Department of Agriculture responsible for Iowa's leadership in state fair exhibits and attractions is composed of a progressive, public-spirited lot of men, coming from all sections of the state. C. E. Cameron, president, has held the position for 18 or 20 years and he is one of the best fair men in America. A. R. Corey, the secretary, knows the game from the ground up and he keeps in close touch with all interests and all industries. He is a big man in a big place. The directors are alive to the best interests of the commonwealth and to their keen interest and enthusiastic support Iowa is indebted for much of the prominence given her because of the matchless position the great fair holds among similar institutions the country over.

IOWA STATE FAIR MEETING.

From The Horseman, Indianapolis, Indiana.

Never was a race meeting staged under more favorable conditions than the Great Western Circuit meeting in connection with the Iowa State Fair at Des Moines this week. The weather was ideal for the comfort of the people and warm enough to be conducive to fast miles. E. J. Curtin, superintendent of speed, had this model racing plant, including the track, in as good condition as the best of the big line plants and kept it that way throughout the week. This was in spite of the fact that many other attractions during the day and night were staged upon the speed oval, including the gallopers, auto polo, etc. The grand stand and bleachers were kept clean and fit for the use of the most particular person and at no time during the racing was there any dust flying to mar the pleasure of those who came out to see the races.

Suffice it to say the people of Iowa enjoy harness racing, for every day the great grand stand and bleachers were filled to their capacity. All during the morning hours at the grand stand windows there were continuous lines of people waiting to get an opportunity to purchase seats and long before the races started the most desirable seats were filled anxiously awaiting the first heat.

Some secretary may ask why these people from Iowa and thousands from other states attend the harness racing here in such large numbers, with the attendance increasing each year. The answer is simple. They enjoy harness racing and they know they can attend under the most favorable conditions, for Mr. Curtin looks after their comfort and personally superintends all details. From the handsome brick paddock (the best racing paddock in America) he has the horses coming onto the track for the next heat as the horses of the preceding are finishing. There are no long, tiresome waits for the public, and the racing is finished for the day in time for the people who wish to go home that they may reach there at a reasonable hour. These are the features that make racing attractive at the Iowa State Fair and fill to overflowing those great stands and bleachers.

Des Moines, Iowa, August 29.—Iowa State Fair's meeting afforded the first real practical test of the Harness Horse Association's plan of added money and the following statistics compiled from the results of the contests at Des Moines ought to be interesting.

In the first place, it will be noticed that the lowest fourth money in any class event was $70.80, which, less the starting fee of $15, netted the winner of this fourth money $55.80, or almost as good as second money in a $400 purse under the old 5 and 5 plan; while the fourth money in the 2:14 pace was $291, less an entrance fee of $45, which was better than first money in a $600 purse under the old system. And everybody knows that fourth money under the old order of things nets the winner nothing. The following table tells its own story:

Class	Added by Association	Entrance Fees Paid	Total Purse	First Horse	Second Horse	Third Horse	Fourth Horse
2:14 trot ------	$1,500	$1,042	$2,542	$1,271	$635.50	$381.30	$254.20
2:25 trot -------	600	153	753	376½	188.25	112.95	75.30
2:17 pace -----	600	176	776	388	194.00	116.40	77.60
2:16 trot ------	600	108	708	354	177.00	106.20	70.80
2:10 trot ------	800	93	893	446½	223.25	133.95	89.30
2:20 pace -----	600	221	821	410½	205.25	123.15	82.10
2:14 pace -----	1,500	1,410	2,910	1,455	727.50	436.50	291.00
2:13 trot ------	600	125	725	362½	181.25	108.75	72.50
2:09 pace -----	800	145	945	472½	236.25	141.75	94.50
2:20 trot ------	600	153	753	376½	188.25	112.95	75.30
2:12 pace -----	600	85	685	392½	196.25	117.75	78.50
2-year-old trot	300	111	411	205½	102.75	61.65	41.10
3-year-old pace	300	54	354	354	others distanced		
3-year-old trot futurity ----	700	294.32	994.32	497	248.58	149.15	99.43
3-year-old pace futurity ----	300	126.39	426.39	Walk-over			
3-year-old pace	W.B.fut'y	402.50	402.50	281¾	120.75		
3-year-old trot	W.B.fut'y	542.50	542.50	542½	others distanced		
	$10,400	$5,241.71	$15,641.71				
Futurity payments--		1,365.71					
		$3,876.00					

Last year of the $18,300 program advertised $10,555 was entrance fees and deductions. This year if we deduct the futurity payments, the total entrance fees were only $3,876 and were all added to the purses, and had the free-for-all filled the net total given by the association would have been $11,200 as compared with $7,745 last year.

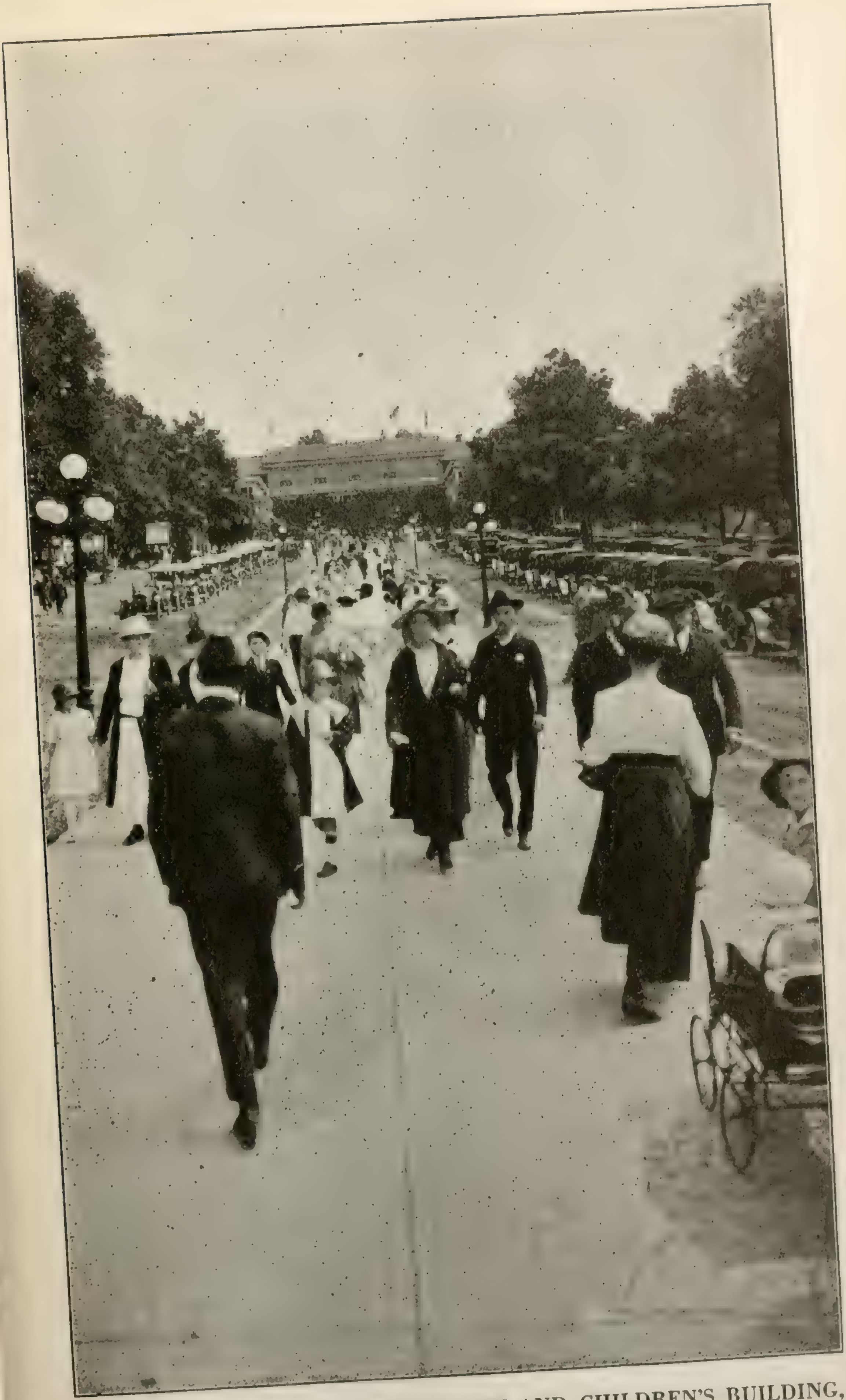
In the 2:14 pace a similar purse advertised on the 5 per cent deduction basis would amount to $3,525 and the entrance fee of $30 would be just a little more than three-fourths of 1 per cent and the starting fee one-half of 1 per cent more. The same is practically true of the 2:14 trot; hence these two stakes were under the old system of a value of about $3,500 and the entrance fee slightly over 1¼ per cent.

The following table shows the value the purses would have been under the 5 and 5 plan:

2:14 trot, $3,065; 2:20 trot, $903.75; 2:25 trot, $903.75; 2:12 pace, $943.75; 2:17 pace, $932.50; two-year-old trot, $476.25; 2:16 trot, $847.50; three-year-old pace, $405; 2:10 trot, $1,078.75; Iowa Futurity trot, $994.32; 2:20 pace, $988.75; Iowa Futurity pace, $426.39; 2:14 pace, $3,525; W. B. Futurity pace, $405.50; 2:13 trot, $906.25; W. B. Futurity trot, $542.50; 2:09 pace, $1,143.75.

Secretary Flaws reports that he secured fifty new members to the Harness Horse Association at Des Moines and that the membership now totals over 700.

NOTE—Additional press reports will be found under the Secretary's report in Part II of this book.



DOWN THE WALK FROM THE WOMEN AND CHILDREN'S BUILDING,
STATE FAIR

REPORT OF COW TESTING EXHIBIT AT IOWA STATE FAIR, DES MOINES, AUGUST 20 TO 29, 1919.

The Cow Testing Association exhibit at the State Fair this year (1919) was organized for the special purpose of bringing to breeders of dairy cattle the importance both of breeding their cows intelligently, and then following this up with selection based upon reliable records.

In planning the exhibit for 1919 an attempt was made to make the front attractive, and thus cause people to inquire what was in the tent, so two pyramids of cans and butter tubs were put outside. One very large pyramid representing 98 cans, equal to 8.466 pounds of milk, and on top of this pyramid a small pyramid of butter tubs representing 350 pounds of butter fat. The other pyramid was composed of 41 cans representing 3,534 pounds of milk, and on top of this pyramid a group of tubs representing 190 pounds of butter fat.

The small pyramid represented the production of the original Arkansas cow which was represented in the cattle part of the exhibit, and the large group of cans and butter tubs represented the production of her three-quarter blood Holstein granddaughter. Between these two pyramids was placed a sign, "What Pure Bred Dairy Sires Do," and other placards were placed to explain what the pyramids represented.

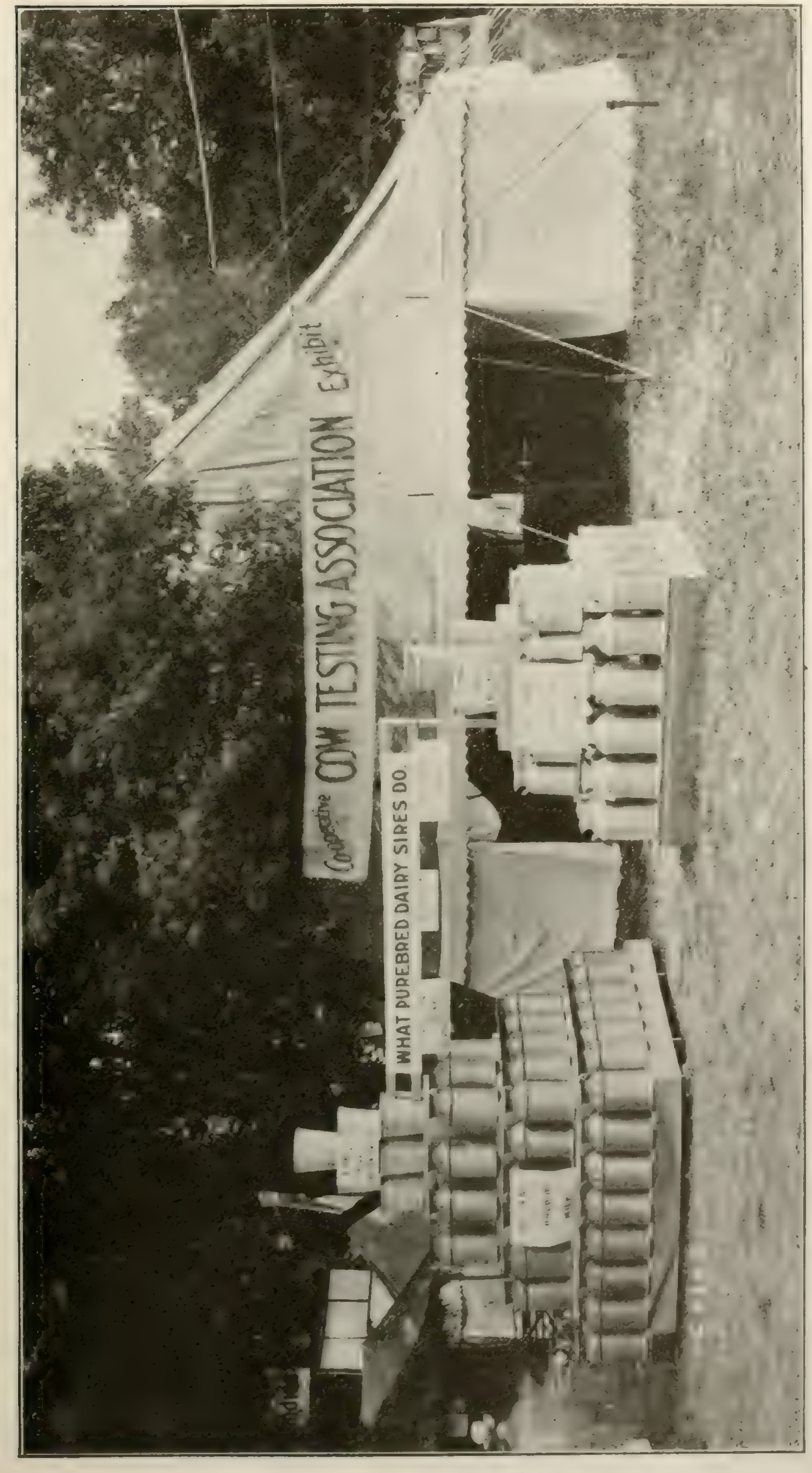
The cattle for this exhibit were taken from the Cow Testing Association of Polk county, and from the Iowa State College dairy herd. The exhibit was composed of ten cows, and an enlarged picture of one cow which could not be obtained. The picture was that of one of the original Arkansas cows which were secured, about ten years ago for the purpose of demonstrating the value of the pure bred dairy sire in increasing dairy production. Next to the picture stood a daughter of this cow which was sired by a pure-bred Holstein bull, and next to this grade cow stood her daughter by another pure-bred Holstein sire.

The three-year-old record of the original Arkansas cow shown in the picture was 190 pounds of butter fat. The three-year-old record of the daughter was 208.6 pounds of butter fat. The record of the granddaughter of the original cow, and hence a three-fourths blood Holstein, was 355.9 pounds of butter fat at three years of age. This part of the exhibit readily showed how the production was consistently improved by the use of the pure-bred sire.

Over these cows hung the slogan, "Pure Bred Dairy Sires Stimulate Production," and other signs hung just below showing the breeding of the different cows in that group, and below these were suspended the records of the individual cows.

The next group of cows were four pure-bred Guernseys which showed the necessity of following up breeding with selection based upon records, and these cows fell into two groups. The first were three-quarter sisters by the same sire and out of half-sisters. The record of the first cow as a two-year-old was 458.9 pounds of butter fat; the record of the next cow at the same age was only 264.1 pounds of butter fat. The next two cows of this group were daughters of the same pure-bred cow, but were by different sires, thus they were maternal half-sisters. The record of the first cow of this group was 420.2 pounds at three years of age. The record of the other cow of this group was 249 pounds in nine months at three years of age. Although the last cow had only been on test nine months her record indicated that she would have difficulty in making the Advance Registry, while her half-sister made the Advanced Registry with the good record of 420 pounds.

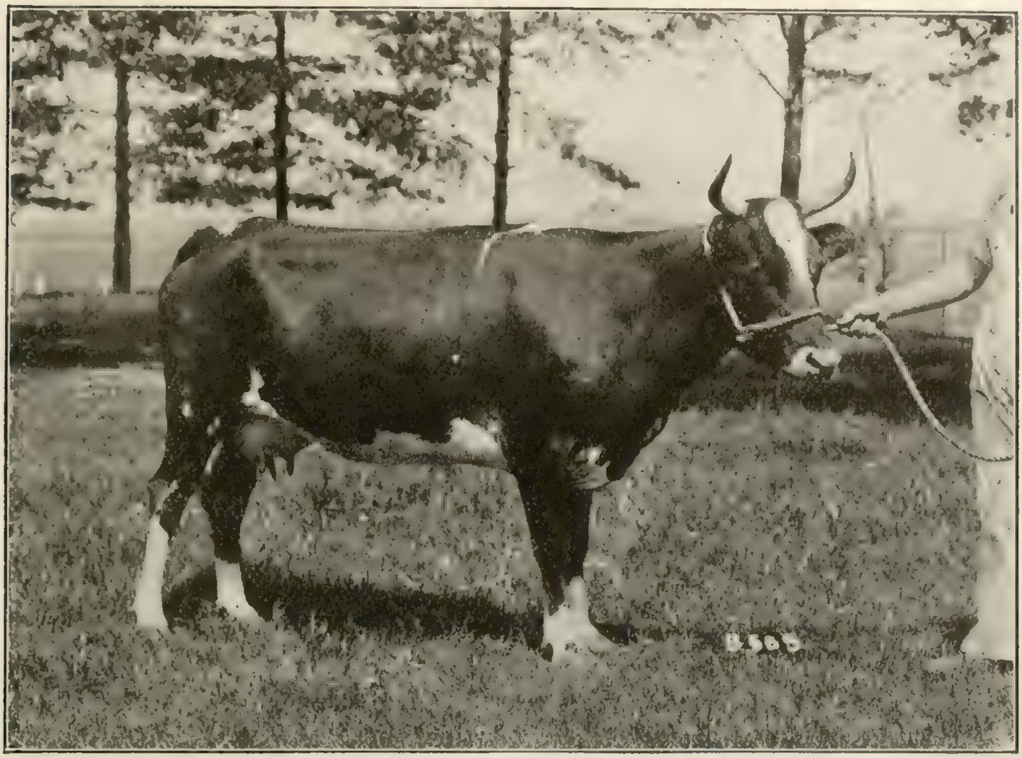
Over this group of cows was the slogan, "Breeding Must Be Supplemented With Selection," and below this sign hung the explanation of the breeding of these cows and their records.


Cooperative COW TESTING ASSOCIATION Exhibit
WHAT PUREBRED DAIRY SIRES DO.

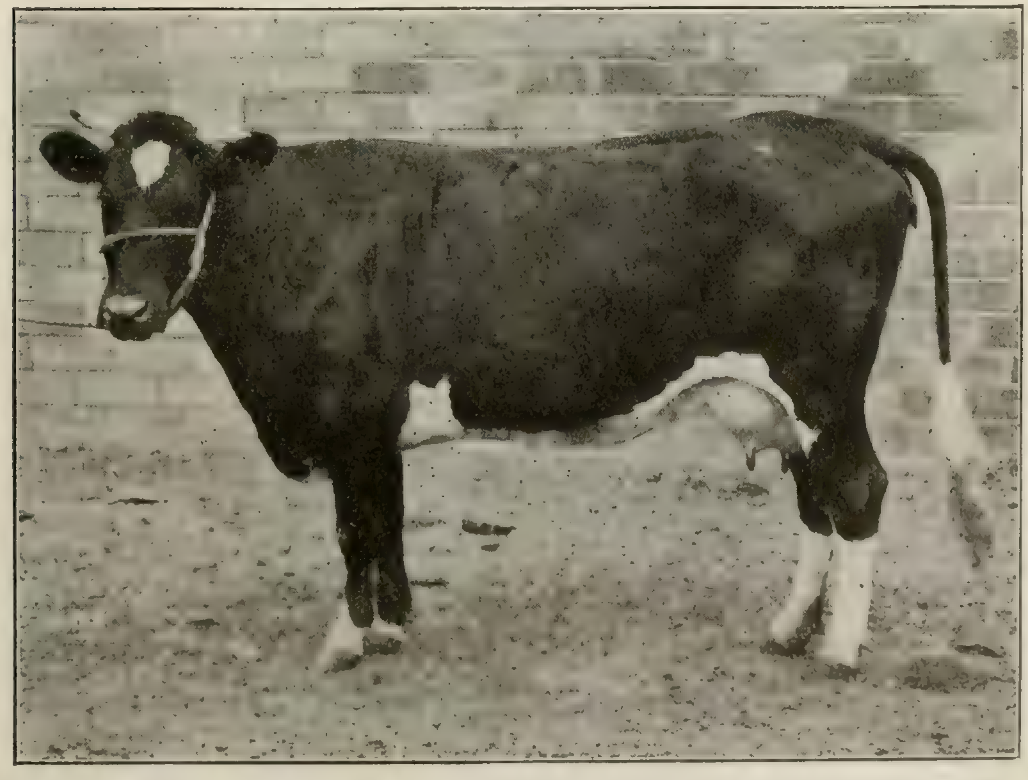
FRONT VIEW OF COW TESTING ASSOCIATION EXHIBIT AT IOWA STATE FAIR, 1919.

THE VALUE OF THE COW TESTING ASSOCIATION

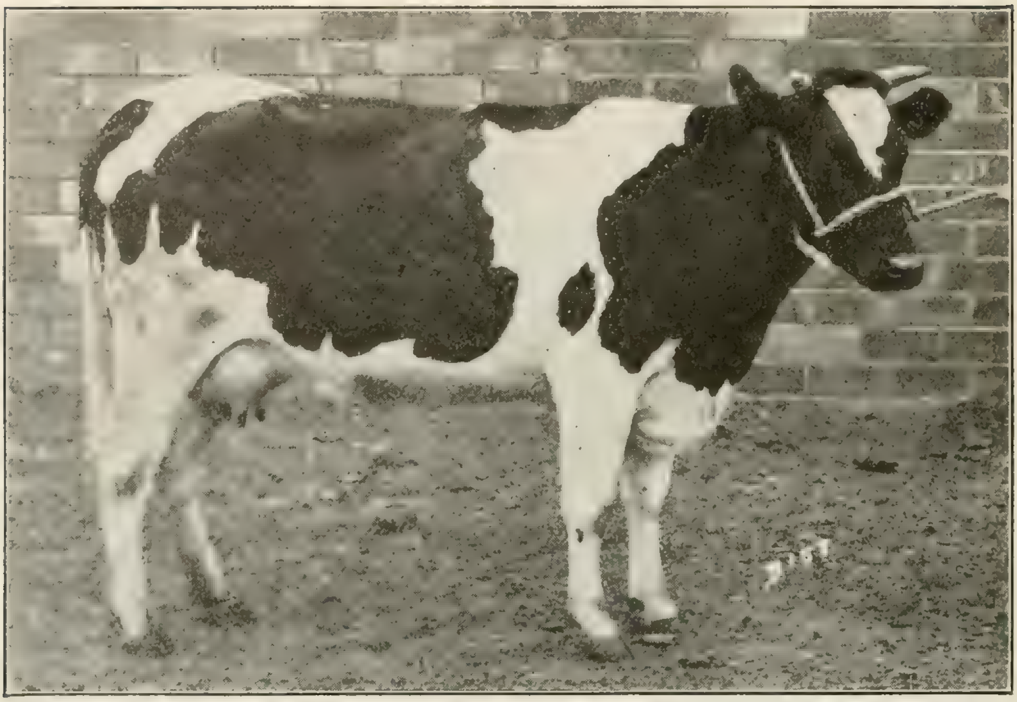
INTERIOR VIEW OF COW TESTING EXHIBIT AT IOWA STATE FAIR, 1919.



Original Arkansas Scrub. Three-Year-Old Record: Milk, 3,534 Pounds; Butterfat, 190 Pounds.

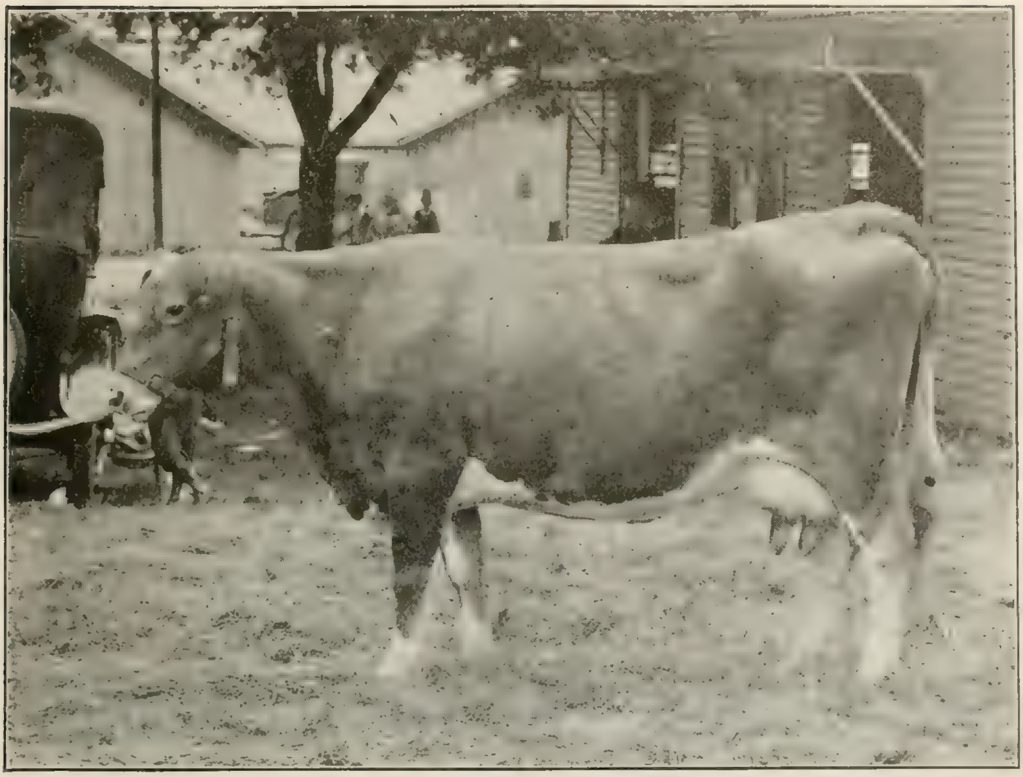


Half-Blood Holstein Out of Arkansas Scrub Cow. Three-Year-Old Record: Milk, 4,593.5 Pounds; Butterfat, 208.6 Pounds.

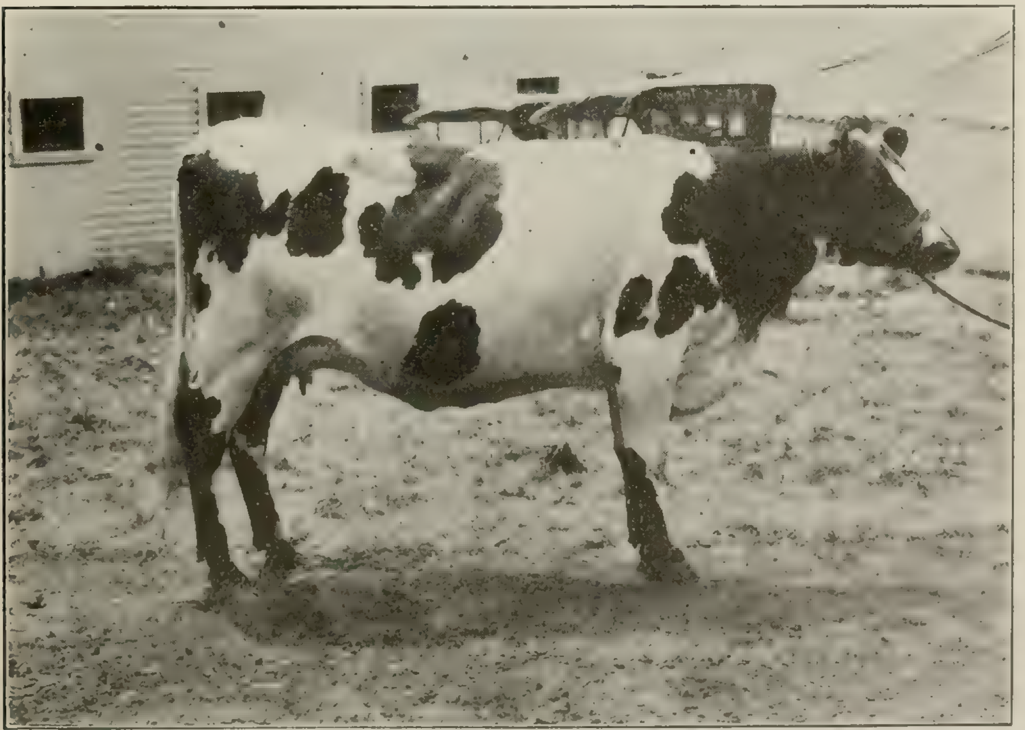


Three-Quarter Blood Holstein Out of Half-Blood Holstein Shown on Another Page. Three-Year-Old Record: Milk, 8,466 Pounds; Butterfat, 355.9 Pounds.

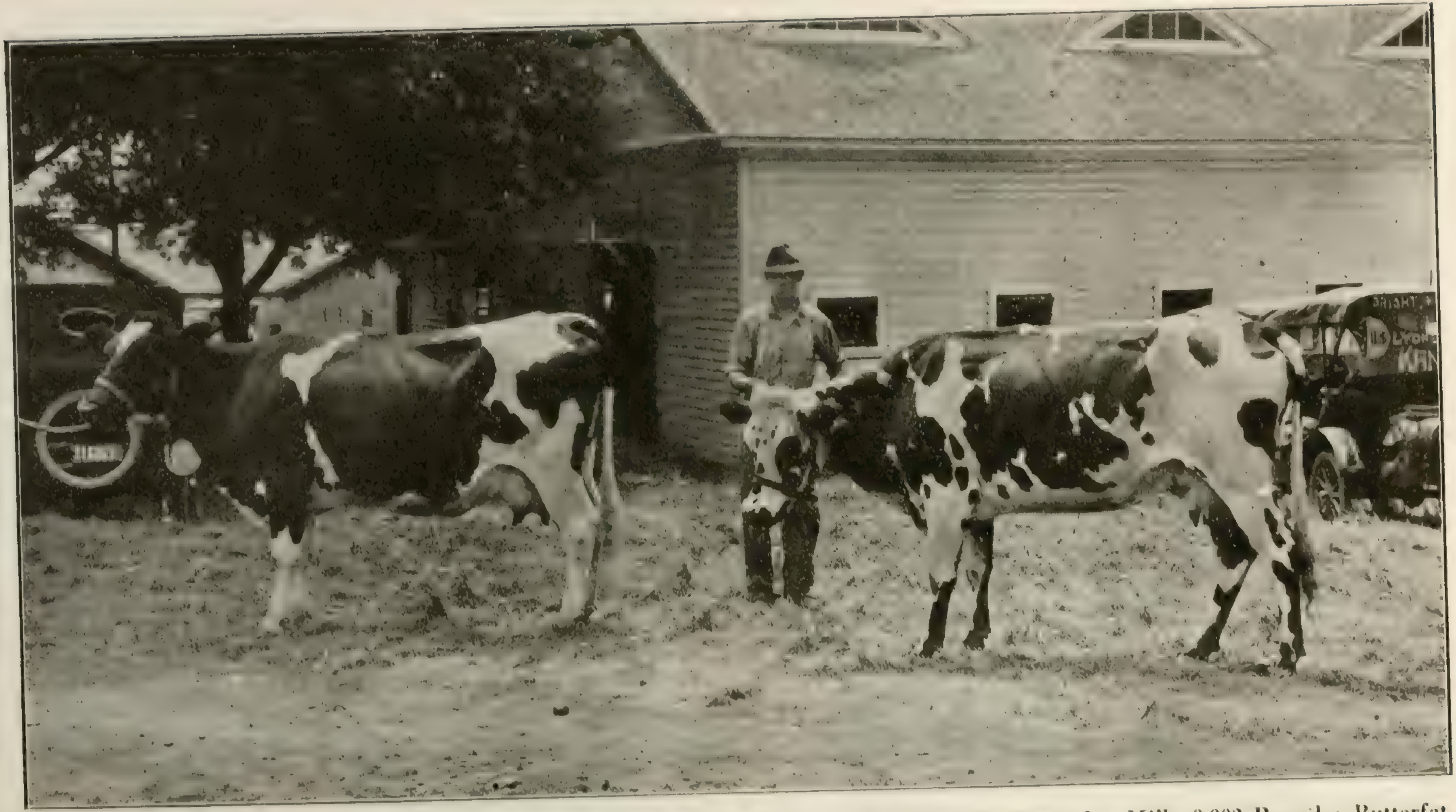
Pure-Bred Guernsey Cow, Three-Quarter Sister to the Cow on the Next Page. Two-Year-Old Record: Milk, 9,914 Pounds; Butterfat, 458.9 Pounds.



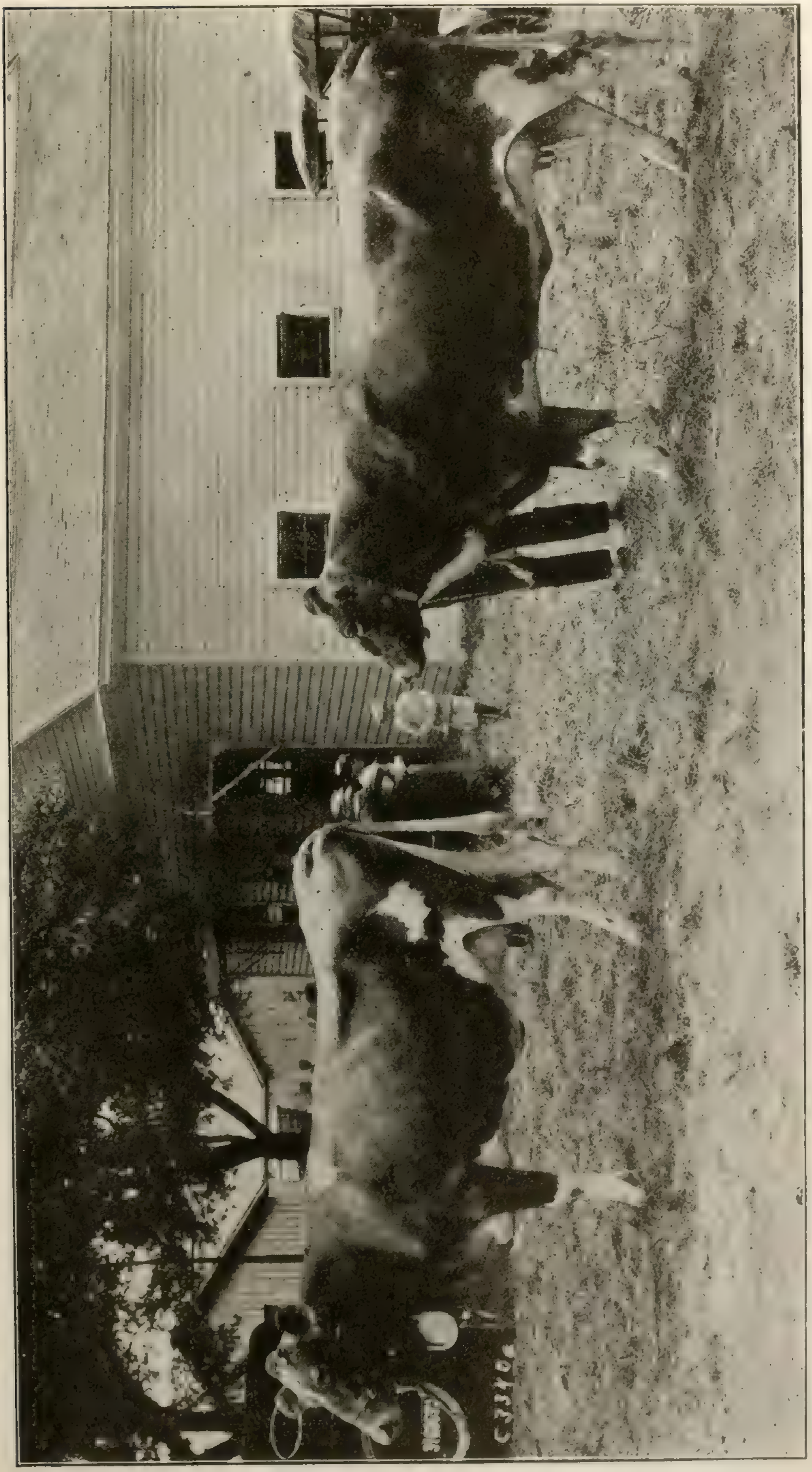
Pure-Bred Guernsey Cow. Three-Quarter Sister to Cow on Preceding Page. These Cows Were by the Same Sire and Out of Half-Sisters. Two-Year-Old Record: Milk, 5,364 Pounds; Butterfat, 264.1 Pounds.



Grade Holstein. Large, Straight, Capacious, Producing Only: Milk, 6,455 Pounds; Butterfat, 199 Pounds. Another Cow of About the Same Type But Very Droopy at the Rump, Stood Next to This Cow. Her Record Was: Milk, 6,000 Pounds. Butterfat, 209.9 Pounds.



Grade Holsteins, Showing the Lack of Correlation of Form With Function. Five-Year-Old Record: Milk, 9,002 Pounds; Butterfat, 287.9 Pounds. Three-Year-Old Record: Milk, 6,677 Pounds; Butterfat, 221.7 Pounds.



Two Pure-Bred Guernsey Cows (Half-Sisters) Out of the Same Cow by Different Sires. Three-Year-Old Records: Milk, 9,508 Pounds; Butterfat, 420.2 Pounds; Butterfat, 249 Pounds (Nine Months). Will Have Difficulty in Making the A. R. Requirements.

The next group of cows was composed of four grade Holsteins. These cows were brought in to show the different types of high and low producing cows. The first cow of this group was a fine, large, straight-topped, capacious cow, showing a good mammary system with a well-developed udder and long large milk veins. Her record at five years of age was 288 pounds of butter fat. Next to her stood a three-year-old heifer, rather scrawny in appearance, very droopy at the rump and shallow of body. Her mammary system was very poorly developed, she having a bottle-shaped udder, naturally one-sided, and seriously cut up. Her record, however, was 222 pounds of butter fat at three years of age, and according to the rules for computing the probable mature production of a heifer, this cow will make as heavy a producer as the first cow in this group.

The next cow was a large, strong, straight-topped individual showing a capacious body with a wonderful spring of rib. She was, however, perhaps a little beefy in conformation, and she did not have a very large udder, although as large as that of the cow previously described, and rather better in shape. Her record at four years of age was only 199 pounds of butterfat. She was the type of cow that many men would select as a good farm dairy cow. Next to this stood a cow, large like the one just described, but seriously droopy in the rump, and because of that she presented a rather ugly appearance. She, however, made a record of 210 pounds of butter fat at three years of age. Over this group of cows hung the slogan, "Milk Scales and Babcock Tester Are the Impartial Judges."

A great many people visited the exhibit this year, and many people came there who had been there in previous years and who had learned to look for this exhibit.

While not so many as last year were addressed by the men explaining the exhibit, it is estimated that 4,625 people visited the exhibit this year.

PART V

Report of Secretary of the Iowa Farm Bureau Federation.

J. W. Coverdale

The Iowa Farm Bureau Federation is the direct result of the team work done by the individual Farm Bureaus during the war period in helping stimulate food production and food conservation. The united action taken by the different County Farm Bureaus in distributing the scant supply of seed corn of the spring of 1918, the Farm Bureau exchange for the distribution and marketing of special crops, the distribution of labor and the stabilization of the seed corn prices, and especially the corn husking prices of 1918, are directly responsible for the Federation. Many of the counties began agitating State and National organization two years ago, but sufficient strength did not develop until the corn husking was over last fall, and in the signing of the armistice it was apparent that the farmers needed organization for the reconstruction period as they had never needed it before. So on December 27, 1918, at Marshalltown, Iowa, seventy-two of the one hundred Farm Bureaus had delegates present, and ten other counties sent proxies favoring State organization.

The object of the Iowa Farm Bureau Federation is not to displace or run counter with any organization now existing, but rather to develop, strengthen, and correlate the work of the County Farm Bureaus of the State; to encourage and promote co-operation of all representative agricultural organizations in every effort to improve facilities and conditions for the economic and efficient production, conservation, marketing, transportation and distribution of farm products; to further the study of the constructive agricultural legislation; to advise with farm bureaus in all movements that affect their interests.

In order to carry out the objects of the Federation it was necessary to appoint an Organization Committee, a Marketing and Transportation Committee, a committee on Legislation and Representation, and a committee on Education. They adopted the following program of work:

MARKETING AND TRANSPORTATION

1. The Federation will actively encourage and assist in the co-operative movements and enterprises which are advantageous to farmers both for protective purposes and to give help in the solution of marketing and distributing problems.

2. Increase the service of the Farm Bureau Exchange and urge wider distribution of state exchange lists.

3. Urge standardization and uniformity of pack of farm products, especially perishable goods and collective marketing of same through organizations for individual lines, such as Potato Growers' Association, Wool Growers' Association, etc.

4. Urge the establishment of research department in the Iowa State College for the study of marketing and transportation problems.

5. Co-operate with Corn Belt Meat Producers' Association, Co-operative Grain Dealers' Association, and other similar organizations in rate and transportation problems affecting the producer and distribution of his products.

6. Encourage collective buying through local dealers, providing satisfactory prices and arrangements can be made, and to encourage the local dealers to join together in the collective purchase of the products of their business, and thereby promote greater economy in the handling of these products and lessen the expense to the consumer.

7. Encourage the gathering of accurate agricultural statistics through surveys by the Farm Bureau co-operators.

EDUCATIONAL

1. Encourage and support the state program of Farm Bureau work as outlined by the County Agent Leader and by the individual Farm Bureaus.

2. Urge legislation making the organization of consolidated schools easier.

3. Urge Iowa State College and other colleges to provide a business course in agriculture of about three months for farm boys, beginning about December 1st and ending about March 1st.

4. Urge the Agricultural Extension Department to provide week schools with farm business methods and possibly marketing as the leading work for all places where they could be conducted.

5. Urge co-operation with Smith-Hughes law to establish agricultural and vocational work in the schools of the State.

6. The Federation will present to city people and the consumers the real agricultural situation of the State through a Speakers' Bureau. This bureau will be composed of farmers who are good public speakers. Dates will be made for these speakers at meetings of Chambers of Commerce, consumers' organizations, etc.

REPRESENTATION AND LEGISLATION

The Federation will try to safeguard in all possible ways the interests of farmers by:

1. Securing adequate representation of farmers on commissions, committees, etc.

2. Actively presenting the farmers' viewpoint and needs and securing due recognition.

3. Proposing new and desirable legislation and watching other legislation affecting farmers.

4. Insist on adequate appropriations for educational work in our schools and colleges.

5. Demand the repeal of the Daylight Saving Law.

6. Collect information relative to Government ownership of railroads, merchant marine, etc., and its affect upon agriculture.

7. Insist on a fair and just hearing on all bills relating to agriculture and its development.

To accomplish these ends, the secretary's office will on request collect data and information for federation members, and will lay such matters as members may refer to it before the board of directors for its action and reference to committees.

Just how close the program of work is being followed may be noted in the following report of work to date:

February 13th President Howard sent to Ithaca, New York, to attend New York State Farm Bureau Federation meeting and to take part in the preliminary plans for a National Farm Bureau Federation.

Marketing and transportation committee met with Corn Belt Meat Producers' Association at Des Moines on January 28th to assist when possible in the livestock marketing problems. At this meeting the inefficient system of transporting livestock was presented to a regional director of railroads, and as a result the service was improved immediately.

On February 24th action was started in the legislature for the amending of the present County Agent law, and it was passed and became a law on March 5th.

Asked for legislation for larger appropriations for vocational work in connection with Federal Smith-Hughes law, which was granted.

Asked for favorable legislation for the control of bovine tuberculosis, which also became a law.

Voted to co-operate with the Iowa Corn Belt Meat Producers in the employment of a trouble man at U. S. Stock Yards.

April 8th voted to ask Congress through a petition from the farmers of Iowa that the daylight saving law be repealed, if possible, before the beginning of the harvest season. One hundred eighty-nine thousand Iowa farmers signed these petitions in the short space of ten days, and they were delivered to Iowa representatives in the United States Senate and Congress by President Howard. Together with other Federation presidents, he did some special work at Washington on the measure, which resulted in its passage over the second veto.

The handling of the Iowa wool clip of 1918 by the Government led the Federation to the belief that the fleece wool growers of Iowa should organize a special organization for the standardizing of their product and the efficient marketing of same. The Federation gave the wool growers its support with the result that over one million pounds of wool have been handled co-operatively with very satisfactory results.

Voted not to favor a joint committee of packers and producers, but to favor a producers' committee that shall have authority to co-operate with the packers or other organizations in ironing out production problems. A committee was sent out to Kansas City, and the result was that a producers' committee of fifteen was adopted, and Mr. C. W. Hunt, the chairman of the Marketing and Transportation Committee of the Federation is a member for Iowa, representing the swine interests. H. C. Wallace, of the Corn Belt Meat Producers, represents the beef interests for Iowa.

Voted to hire legal counsel to recommend to the Code Commission, where possible, certain clarifications of the laws affecting agriculture. This was done upon invitation from the Code Commission.

Office opened in Room 24, Masonic Building, Ames, Iowa, May 1, 1919.

May 15th President Howard called to Washington by Chairman E.

N. Hurley to ascertain sentiment of Iowa farmers as to what to do about the Merchant Ships now owned by the government.

May 26th met with Illinois and Indiana Farm Bureau Federation on problem of employing jointly a special man to do some investigational work on cost of production and marketing practices at the large market centers of the corn belt.

June 1st Federation Secretary called to Washington by Secretary of Agriculture to confer on recommendations for special investigation on cost of production.

July 28th, met with Illinois, Indiana, Michigan, Minnesota, Kentucky Federations at Chicago to talk over the effect of the government agitation on the high cost of living, National legislation affecting agriculture, and preliminary plans for the National Federation, which is to be effected at Chicago on November 11th and 12th.

August 5th, 6th and 7th, met in Chicago with Illinois and Indiana Federations to conduct a hearing with the five big packers, a member of the Federal Trade Commission and Union Stock Yard representatives relative to packer legislation. The Federation did not believe it was ready to voice sentiment for or against the proposed legislation without knowing just how it would affect the live stock producing interests. As a result of the hearing, and after presenting the arguments for and against it to the Federation directors, it was voted that it be the sense of this Federation that we believe that some form of regulations of the packing industry not harmful to the live stock producing interests is necessary, but that we do not approve of one-man control nor government ownership at this time. While at the hearing of the packers the continual agitation on the high cost of living was having its affect upon agricultural products, and the daylight saving repeal act had been passed the second time and was before the President, it was deemed wise and expedient to send the Federation Presidents from Iowa, Nebraska, Illinois, Indiana and Ohio to Washington. A hearing was had with the Secretary of Agriculture and upon August 13th this committee appeared before President Wilson and presented the following appeal for agriculture:

The members of the State Farm Bureau Federation must now decide the extent of next year's food production on their farms.

Present agitation over the high cost of living attempts to saddle in large measure responsibility for high prices on the farmers, who, while discerning their share, justly refuse to bear any great part of the blame.

In the present chaotic state of affairs, the farmer says to him who wishes to arrive at the facts as they are, "Come! Let us reason together."

In the whirl of affairs clear thinking is difficult; formulation of statements well-nigh impossible.

Today, however, the Farm Bureau Federations of Ohio, Indiana, Illinois, Iowa and Nebraska, potent factors for increasing production in the heart of the meat, milk and grain-producing sections of the United States, endorse through their authorized officers the statements following:

Under war pressure when fighting a foreign foe farm production was not shortened; it was increased tremendously. Upon the fair or unfair attitude and action of capitalistic monopolies and organized labor, upon the sanity of their next immediate pronouncements affecting National and International affairs, depends the decision of the American farmer in planning his next year's program of work. Now is the seeding season for wheat. Now is the time the farmer selects the gilts and brood sows that will give birth to the 1920 pig crop. Now is the time when the dairyman determines the number of cows he wants to milk twice daily for the next year. Now is the time the cattle feeder determines whether he will sell his corn as beef or as corn. Now is the time silos must be filled if feeding operations are to be engaged in. Now is the time the farm woman determines the size of next year's flock of poultry. Now is the time when the farmer plans the next year's farm acreage. In short, now is the season when the efficient farmer plans his whole 1920 program. Right now, the American farmer holds in his hands the power to determine quite definitely the size of next year's crop of wheat, milk, cheese, butter, poultry, eggs, in short, all food stuffs, and with that, to determine whether or not the world's table will be abundantly supplied next year. The American farmer individually and in his organizations recognizes his responsibility in this matter, provided, however, that every other good American citizen or foreigner within our borders, will let the scales drop from his own eyes and witness that he also has an individual and an organized responsibility that cannot be shifted. The American farmer does not sympathize with artificial or political quackery for befogging the real issues, but impotent in giving even passing relief. The American farmer is willing to squarely meet the issue. If prices cut to the bone all along the line, farm products, wages, manufactured goods, rent, wholesalers and retailers profits, will bring the desired results, which he rather doubts, he will go as far along that road as any, but he will not go alone. Let the whole brotherhood of man go the full route. If increased production will clarify the situation, the American farmer will jointly, with all of his fellow citizens, buckle his belt for a most strenuous campaign for production, but here again he is determined that he will not work alone.

If capitalistic monopoly wants enough food produced that it may be feasted, if organized labor wants enough food that it may be fed, if the do-nothing dwadlers want enough food produced, so that they may occasionally eat, let them stand forth now at this time, when the farmer must determine his 1920 food production program, and declare by deeds—cutting out of profiteering in goods and wages, going honestly to the business of preparing and purveying the necessities of life, going honestly to the job of doing a full day's work for a full day's pay—their willingness to co-operate. Failure of these forces to do this now will be a boomerang, that ere the next cycle of the season, will effect a condition of living now undreamed.

(Signed)
O. E. Bradfute,
President, Ohio Farm Bureau Federation.
J. G. Brown,
President, Indiana Federation of Farmers' Associations.
D. O. Thompson,
Secretary, Illinois Agricultural Association.
J. R. Howard,
President, Iowa Farm Bureau Federation.
T. C. Crocker,
President, Nebraska Farm Bureau Association.

August 25th was known in Iowa as Farm Bureau Day at the State Fair. Fourteen Farm Bureau exhibits were in place in the Agricultural Building, a Farm Bureau headquarters was established where people could register, county exhibits of livestock and baby beef were in evidence, a special camp ground for Farm Bureau members was established and nearly two hundred tents were pitched for the week. President S. L. Strivings of the New York State Farm Bureau Federation, delivered the principal address of the day to one thousand interested members. Ex-Food Administrator J. F. Deems delivered an address on "Business Agriculture," in which he quoted education, organization and fertilization as the necessary elements to business agriculture. President J. R. Howard reported on his Washington experience.

As a result of this splendid gathering it was decided that Iowa should play her part in the organization of the National Farm Bureau Federation, and that plenty of funds should be available for its use, and that the Farm Bureau membership should be increased. A committee was appointed to make plans for the raising of a $250,000.00 emergency fund for the Federation at once. The opening drive for this fund and for one hundred thousand Farm Bureau members opened in Hardin County on September 22d, and the following week in Butler County. The Farm Bureau membership is now standardized at $5.00 per year over the entire State, and no man can subscribe to the Federation special fund unless he becomes a Farm Bureau member.

STATISTICS ON THE IOWA MEMBERSHIP DRIVE FOR THE FARM BUREAU

Number of Iowa Farm Bureaus	100
Total membership January 1, 1920	104,388
Average membership	1,044
Number of Bureaus with more than a thousand members	53
Over Two Thousand—Benton	1
Less than five hundred	3
County with highest percentage of members——Dickinson	98%
Membership on July 1, 1919	30,600
Total new members secured in the drive	73,788
Increase	242%
Duration of Drive—(13) Thirteen weeks or (52) Fifty-two days—Average members secured each day	1,423
Total contributions to the Federation Special Fund	$350,000

The Secretary has attended and spoken at sixty-four meetings in the State since May 1st, and reached 38,000 people with an explanation of the Farm Bureau program of work besides a large number of meetings which have been attended by other officers of the Federation.

The chairman of the Marketing and Transportation Committee is also a member of the Producers' Committee of fifteen that meets monthly with the packers.

A movement is on at the present time to get Iowa's three hundred co-operative livestock shipping associations to federate into a State organization and later into a National organization in order that they may standardize their methods of handling stock and that they may get the best service possible at the market centers. This was done at Chicago on December 3d, and the National president was selected from Iowa in the person of Knute Espe, of Story county.

During the week of October 20th to 24th the Federation furnished a man who met with the business men of Iowa in five group meetings and explained to them the Federation's marketing program on community centers, which is as follows:

The 1919 program of the Marketing and Transportation Committee of the Iowa Farm Bureau Federation contained the following statements bearing on co-operative merchandising:

"The Federation will actively encourage and assist in the co-operative movements and enterprises which are advantageous to farmers both for protective purposes and to give help in the solution of marketing and distributing problems."

"Encourage collective buying through local dealers, providing satisfactory prices and arrangements can be made, and to encourage the local dealers to join together in the collective purchase of the products of their business, and thereby promote greater economy in the handling of these products and lessen the expense to the consumer."

PUBLICITY

Publicity of the work of the State Federation in the early part of the year was rather limited on account of lack of time to secure accomplishments. In early May a little circular giving the constitution and by-laws, the officers and directors and the program of work was issued in a twenty thousand edition. Eighteen thousand daylight saving repeal petitions were circulated in June, and stories were furnished the agricultural press from time to time, but it was not until September 1st that a considerable amount of publicity was carried. Mr. Ivanhoe Whitted, formerly director of publicity for the State Fair, started work as publicity director for the Federation about October 1st, and since that time considerable more material has been published.

For the membership campaign three hundred thousand large posters were sent, three hundred to each county. Two hundred thousand membership checks were printed for the drive, besides hand bills, expense blanks, office blanks, etc.

On October 2d there appeared the first issue of the Iowa Farm Bureau Messenger, and since that time five issues have been printed. Connection with a clipping bureau was established in early October and over two hundred clippings a week of Farm Bureau work have been coming to the office from the country weeklies and the daily press.

FARM BUSINESS RECORDS

Inasmuch as cost of production is one of the objects of the Federation, the practical method of getting some facts is through a system of Farm Records. The Agricultural Extension Department of the Iowa State College through Mr. Thompson, of the Farm Management Section, has been issuing these Record Books for sale at cost. Last year this was stopped by educational authorities. The Federation took the matter up and published an edition of forty thousand copies, which came from the press beginning December 10th. Since that time better than thirty-seven thousand of the books have been sold, and we have been selling them at cost plus the handling. An additional ten thousand edition has been ordered.

THE AMERICAN FARM BUREAU FEDERATION

Ten of the eleven members of the Executive Committee attended the organization meeting of the American Farm Bureau Federation at Chicago on November 12th, 13th and 14th. A total of thirty-two people from Iowa was at this meeting. Thirty-three of the different states responded to roll call, and after three days and two nights of deliberation the constitution and platform of the big organization was completed and adopted. In the election of officers, the honor of being the first president of the American Farm Bureau Federation fell to our worthy president, Mr. J. R. Howard. In the first meeting of the National Executive Committee the Temporary Headquarters were assigned to the office of the Secretary of the Iowa Farm Bureau Federation at Ames. The final meeting for completion of the A. F. B. F. in permanent form will be held at Chicago on March 3, 1920.

HELPING NEIGHBOR STATES ORGANIZE

September 4th, the Secretary went to Minneapolis, Minnesota, and helped Minnesota federate. October 1st to Manhattan, Kansas, and on November 7th President Howard to Louisville, Kentucky, all of which states formed federations and were represented at the Chicago meeting.

Ames, Iowa,
January 8, 1920.

SECRETARY'S REPORT
TO THE OFFICERS AND MEMBERS OF THE IOWA FARM BUREAU FEDERATION FOR THE YEAR 1919

RECEIPTS

Money received and turned over to Treasurer and receipts taken	$221,467.70

DISBURSEMENTS

Expense Account	118,584.02
Checks charged back	2,158.06
Total Disbursements	$120,742.08
Cash balance on hand January 1st, 1920	$100,725.62

Respectfully submitted,

....

Secretary.

Itemized expense account attached hereto.

REPORT OF SECRETARY ON FINANCES

General Office	$ 5,726.43
Expense of Executive and Committee Meetings	2,519.95
Expenses of Organizers	104,673.55
Rent	238.50
Telephone and Telegrams	263.66
Printing	3,407.52
Postage	509.17
Supplies	313.94
Equipment	906.32
Freight and Express	24.98
Total	$118,584.02

REPORT OF THE
FIRST ANNUAL CONVENTION
OF THE
IOWA FARM BUREAU FEDERATION

Held in Des Moines
January 8-9, 1920

INTRODUCTORY STATEMENT

It is safely within the bounds of reason and conservatism to assert that the First Annual Meeting of the Iowa Farm Bureau Federation marks the beginning of a new order for Iowa agriculture.

This meeting was held in Des Moines, January 8 and 9, 1920. More than twelve hundred actual, honest-to-goodness tillers of the soil journeyed to the Capital City from all parts of the state to take part in its deliberations.

The weather was of the bitter, biting sort that Iowa generally has on tap in January. Railroad passenger service was not of a sort to stir enthusiasm. The Auditorium in Des Moines, where sessions were held, was little better than the outside atmosphere practically all of the first day. It was strictly an overcoat session. However, near-zero temperatures held no terrors for the hardy men who, from the nature of their calling, have to contend with weather extremes and vagaries in season and out, and the Federation spirit waxed enthusiastic and frost-proof.

There are an even hundred county farm bureaus in the state—Pottawattamie County having two—and ninety-nine of these organizations were represented at the meeting by accredited delegates, while visitors and unofficial delegations came by hundreds.

The morning session of the 8th was of a business nature. Secretary Coverdale made a report of the last year's activities, committees were appointed and various loose ends and details incident to organizing the convention were taken up.

President James R. Howard made a brief address in which he touched upon some of the numerous problems that appear to have been sidetracked by the business world and left for the farmers of the country to dispose of.

The secretary's review of the past year's work demonstrated that the Federation is working along practical lines, which, if continued—as they most certainly will be—must in the near future bring a material improvement of the conditions surrounding the agricultural industry. In the past, he suggested, the chief aim of all farm propaganda promoted through the medium of agricultural schools and colleges, farmers' institutes, the short course and similar agencies, had dealt solely with the producing end of farming: It had been purely educational, dealing with soil conservation, crop production, meat production, etc. Practically no attention had been given to the economic side—transportation, marketing, etc.

Now, as the secretary intimated, it is one thing to grow a bountiful crop of grain, or to fit a car of hogs or cattle for market, but quite another to be able to sell the output at a figure that insures a reasonable profit over and above the cost of production. It is this side of the business the Federation plans to give attention to, the economic phases, rather than matters of production, although the latter will be by no means ignored.

This being true, the secretary emphasized the importance of formulating a constructive program of activities at once. He told of some of the things accomplished in the past year, the first in the history of the State Federation. In addition to encouraging the formation of co-operative enterprises of one kind and another, where the need was apparent, the officials of the organization had co-operated with the Corn Belt Meat Producers' Association and similar bodies in the work of securing more satisfactory transportation facilities; also with the Iowa College of Agriculture and other educational institutions. He mentioned consultations with committees in the same line of work in other states; with the packing interests; with the Federal Trade Commission; with city commercial organizations, seeking always a basis of mutual operation and co-operation.

Frequent trips to Washington have been made by the secretary and the president of the Federation at the invitation of the President and certain Federal officials, to present the viewpoint and wishes of the farmers of Iowa concerning pending legislation in Congress. Many visits have likewise been made into other states in response to invitations to help in the organization of federations along the line of the Iowa organization.

The Iowa Federation is the outgrowth of the county agent work that has been carried on in Iowa since 1912, when the first county farm bureau was organized. It is more than the outgrowth; it represents the logical development and final full consummation of a wholly practical movement for the improvement of farm life.

The Federation was organized in December of 1918. Representatives from about seventy counties in the state met at Marshalltown for that purpose. A constitution and by-laws were adopted, officers selected, and the infant organization sent forth to face the world and justify the faith of the men who brought it into existence.

From the beginning the new organization seemed destined to fill the proverbial " long-felt-want." A giant field of effort was plainly ripe for exploitation. More and more the agricultural citizenry rallied to its standard. Farming interests showed faith in it. And while the men most active in perfecting the organization were optimistic in their predictions concerning its future, the cordial reception and support given the new body exceeded their most extravagant anticipations.

A big and enthusiastic farm bureau meeting was held at the Iowa State Fair in the closing days of August. Hundreds of farmers gathered from over the state to listen to the advice and counsel of men engaged in this particular field, not only in Iowa, but in other states. It was decided at this meeting to put on a special state-wide campaign to enlarge the membership of the farm bureaus of the state.

A plan of campaign was mapped out and the drive started the last week in September. Members were to be solicited on a life basis. The membership fee of $5 a year would entitle to association with both the county farm bureau and the State Federation. The campaign was to be very thorough. A week was to be devoted to each county. At least one solicitor would be provided for every township, and every farmer and land owner was to be given a cordial invitation to join the new movement.

Hardin County was selected for the initial tryout. Farm bureau affairs in Hardin had been rather down-at-the-heel and lacking in interest, and it was agreed that the results of the week's drive would go far to forecast the future and its possibilities. At the end of that first week when Hardin County made good with nearly twelve hundred farm bureau members there was no longer any doubt in the minds of the leaders as to their duty.

The next week Butler County was canvassed. The week following two counties were covered and from that time on the scope of the drive was widened from week to week as solicitors were obtained and sent into the field until by December fifteen or more counties were covered each week. The campaign closed the week before Christmas with more than 100,000 members enrolled.

In connection with the drive for members, contributions were invited for the purpose of paying the initial expense of the campaign and financing the Federation for future activities. This was purely a free-will offering, separate and apart from the annual membership fee of $5 a year. Members could give much or little, as the spirit moved and as they might be interested in seeing the work go forward. The response was generous indeed. The farmers, for the first time, appeared to realize that they would have to go into their pockets for the wherewithall to finance operations if they were to get anywhere in presenting their problems and claiming their rights in competition with a thousand-and-one other interests and enterprises clamoring for attention.

More than $350,000 was contributed in this way for the use of the state organization. A portion of this fund was absorbed by the expenses of the big campaign, as it cost approximately $1,000 a county to put it over. However, after all expenses were paid, a good working fund is left in the treasury, a portion of which has been invested in interest-bearing securities and the balance will be used in carrying out the working program of the organization.

Such is a summary of events leading up to this first annual convention of the Federation. Meanwhile the farm bureau movement was growing in other states almost as rapidly as in Iowa. In November delegates from thirty-five different states had met in Chicago for the purpose of uniting the various state farm bureau organizations into one grand national solidarity. This was effected. The new body of farmers, the most imposing and significant the country has ever known, is the American Farm Bureau Federation.

A part of the business of the meeting of the Iowa Federation January 8th and 9th was the ratification of the constitution and bylaws of the American Federation and the election of delegates to the same in order to fulfill the requirements for membership in the national body.

There have been and are today hundreds of farmers' organizations of one kind and another promoted in the country. Some of them have been short of life and barren, or nearly so, of accomplishment. Others have lived, grown in membership and influence and served their constituency to good purpose.

One thing, however, American agriculture has so far lacked, and that is a voice for all the agricultural interests of the nation. The agriculture of the country is diversified. It includes a multitude of branches and interests. Its ramifications are legion. There are innumerable problems strictly local in character that can be adjusted and disposed of by local organizations. While Texas, for instance, is concerned with the boll weevil, the wheat growers of the Dakotas are worried over rust and blight. While the Pacific Coast fruit grower in protecting his prunes and oranges the Middle West husbandman is fighting oat smut and hog cholera. As an English farmer of Iowa has been heard to remark: "Hevery man 'as 'is hown little bundle to carry."

All these questions, as has been remarked, are distinctly local in character and can be settled by local effort. That they can be more effectively disposed of by co-operation and collective effort has been demonstrated. Hence the multitude of farmers' organizations.

But above and beyond all these are the great problems of transportation, of distribution, of marketing, of taxation, of representation, of foreign affairs in which, from this time forth, the American farmer is likely to be deeply immersed. These questions, these big, overshadowing questions, are common to all. There isn't a farmer anywhere between Cape Cod and the Golden Gate that isn't concerned with them. And their disposal will have everything to do in determining the profits, or otherwise, of farming operations in the future.

And this is the duty and function of the Farm Bureau Federation. It is the voice for American agriculture. It has no idea whatever of usurping the rights, privileges or place of any other organization. Instead it cordially invites the good will and active co-operation of all other organizations, big and little, of whatsoever kind or character, that are interested in preserving American institutions, protecting American traditions, improving conditions for their fellow men and establishing agriculture upon a basis at once dignified, profitable and enduring.

ADDRESS BY J. E. WOOTERS
ASSISTANT SECRETARY IOWA FARM BUREAU FEDERATION

Mr. President and Gentlemen:

I have faced a good many groups of farmers during my recent activities, but this is the most splendid group of practical farmers I have ever seen in this state. It is a great pleasure for me to come before you to speak briefly with regard to the part I had in this membership campaign.

In speaking to you I realize that I am telling you largely something that you already know a good deal about, because while we have had the direction of the work somewhat, and done some of the planning, you are the men who have actually done the work. You are the men who have made this great thing possible. It has not been a one-man proposition. or a two-man proposition, nor yet of a dozen or a hundred; but thousands of enthusiastic, far-seeing farmers of the State of Iowa have made it possible to accomplish what we set out to do in the beginning of this great drive.

Before taking up the work of the drive I want to say, briefly—and I am speaking rather without close study—something of the previous preparation that had been made for it.

Most of you know that the county agent work in Iowa started about eight years ago, in 1912 when the first county agent was employed in Clinton county. During the next six years the work grew slowly. During that time Mr. Coverdale, your secretary, was the State County Agent Leader. I know something of the difficulty he encountered in forwarding the work. I was in the Extension Department of the College, and while not directly connected with the county agent work was frequently called on for assistance in that direction and I know how hard it was to get people interested.

At the breaking out of the war there were perhaps twenty-five counties organized in this state. That represented the labor of six years. Of course with the war came the organization of everything in this country. From the Department of Agriculture and the War Department the dictum went out that it was desirable to have farm bureaus organized in every county of every state in the Union.

Iowa took that as a literal order. The workers did not stop to question whether it was the best thing to do, whether it was an opportune time, or anything of the sort. They went to work and did it. It was about that time that I started in the work. I had something to do with the movement in thirty-three counties that were organized at the outbreak of the war in 1917.

As I recall it that work started in October and by the first of February following every county in the state was organized, with an average membership of two hundred or more, and had a county agent on the job. That, you might say, was the preparation for this membership campaign; laid the foundation for it—an important thing, it seems to me, because while we were able to accomplish a great deal in four months, in the ordinary course of events it probably would have taken ten years to have completed the work here in Iowa. It would have come in time of course. I have an abiding faith in the American farmer; he may be a little slow in arriving at conclusions, but after a while he sees the right way and follows it.

At the time of the signing of the armistice about one year ago a good many of the men who had been enthusiastic about the farm bureau in the beginning thought that the need for such an organization was past, and there was quite a slump in the membership. We had, perhaps, during the work in the farm bureaus in this state approximately 50,000 members. On the first day of July last there were 30,600 members reported to the State County Agent Leader's office. In the State Leader's office, with which I am connected, it has been the policy to help the county farm bureaus in every way possible, but at that we were carrying the work on in a feeble sort way. I say feeble way because of the lack of competent workers to build up the county memberships.

The Federation of the county farm bureaus in Iowa had been formed at Marshalltown in December, and that gave us a powerful talking point that we had never had for securing members out in the counties. We were going on and in some cases had been remarkably successful in getting men interested in this larger phase of organization work, the State Federation.

I recall with what pride we sent the news out over the state that one county in Iowa had 1,000 members. That was Jasper county. I remember the meeting we held over in Newton when we started that drive. We went about it in a very systematic way. We planned a little better than we had ever planned before and we were getting on fairly well, considering that we had to work with just a few men.

Then the Federation officers conceived the idea of holding a meeting of farmers at the state fair the last of August. How many of you were there? You remember what a goodly number of farmers gathered in the big tent to hear your president, Mr. J. R. Howard, President Strivings of New York, and others, and how they all voiced the thought that we needed organization, and of how they were instructed to take hold of that work and push it

Mr. Coverdale came to me during the fair and asked me to help in this organization work. I had a county all arranged for the drive, everything ready, and I was to go into the county to hold a booster meeting to start the work when I went on a vacation. While I was gone the Federation stole my preparations, went into Hardin County and started the drive on the 22nd day of September.

I have heard many men tell with what anxiety they started that drive in Hardin county. Hardin, as I recall, had about 150 farm bureau members. The plan provided one week's time in the county, with a man to go into every township who would call on the farmers and invite them to become members of this organization. At the close of that week they had something like 1100 members signed up, and then a vision opened before us that we had never even imagined before, for the most optimistic of us had never been able to picture a success like that.

From that time the campaign went forward. The next week a drive was put on in Butler county, a county that had never been very strong in farm bureau work. I suppose there are representatives here from Butler county and they will bear me out when I say that about four or five months before this drive started I went over there to help in the obesquies of the farm bureau of Butler county. They had decided that they couldn't keep it going and were ready to close it up. Then came the drive the last week of September. At its close they had something like 1300 members, and from being one of the most backward farm bureau organizations in the state Butler county had forged far ahead and become the most progressive.

So the drive continued, week after week, adding a little each week, taking on a little more work until the last week, beginning December 20, when twenty-one counties were canvassed, with about 350 picked men in the field calling on the farmers wherever they could go. For the roads that week were almost impassible. One of the most severe storms that ever struck the state came on about December 1 and continued during the month. In spite of it all, the field men went on with the work and built up the membership we now have.

I want to give you some statistics. Statistics, I know, are dry things. I think it was Lord Beaconsfield of England who said that there were three kinds of lies; that there were lies, damn lies and statistics. But these are facts, so far as we can get them, that I am going to give you. I haven't even reduced them to writing, because I didn't want to impose upon you in that respect.

Since February, 1918 there have been 100 county farm bureaus organized in Iowa. The total membership in the farm bureaus on January 1, 1920, according to the figures that we have in our office, is 104,388. Since that time about twenty counties have put on what we call a clean-up campaign, going into the townships that were missed during the first canvass, either because of the bad roads that made it impossible to get over the territory, or because of inability to get sufficient canvassers for the work.

I don't have an accurate check on what has been done by these men that have been secured the last two weeks, but I believe it would bring the total farm bureau membership in the state up to 110,000. We expect to carry that clean-up work into every county in the state, and we expect to have by the first of March not less than 125,000 farm bureau members in Iowa.

Now, the average number of members to the county at the present time is 1044. The number of counties that have 1000 or more members is 53. Six months ago only one county could boast 1000 members. According to my records there is one county that has more than 2000 members, but since coming to this convention I understand that two other counties have gone above the two-thousand mark. Benton county was the first to reach it, and, so far as I know it is still at the top. I understand that both Kossuth and Webster counties are crowding the leader for first place.

The number of counties in the state having less than 500 members is only three. Six months ago there were 90 such counties. The total number of members July 1, 1919, as I have given you, was 30,600. The increase due to this drive is 70,988 members, an increase of 242 per cent in thirteen weeks. Of course when one gets to rambling round among figures he can do a lot of things. I began estimating about how many days work had been done. As I estimated there were about 52 working days during which these canvassers were on the job; and if that be true there have been added to the farm bureaus of this state every working day since this drive started 1432 members—not a bad day's work.

There are a number of other interesting deductions that might be made. A good many counties have asked questions like this: "Since we cannot be first in membership what can we be first in?" And I have always said, "There is not limit on contributions to the Federation fund."

Dickinson county has the honor of having the highest percentage of farm bureau members compared to the number of farmers in the county—98 per cent of the farmers in the county having joined the farm bureau. Records are being broken so rapidly that it is pretty hard to speak with any degree of certainty as to what exists at the present time.

Over in Marshall county when your honored president's township reported that every man in the township was a member of the farm bureau, and that over $10,000 had been contributed in the county, we all thought it was wonderful. But along comes Tama county today saying they, too, have one township with a 100 per cent membership, while the county has contributed $12,750 to the special fund.

I like that word "contribution" better than "donation." We contribute to anything we are vitally interested in, and we donate to something that is a sort of charity enterprise. The contributions to the special fund run from $3,000 to $350,000. We feel that this is one thing that has shown in a better way, perhaps, than any other, the enthusiasm that is back of this great movement; because when men believe in a thing they are not only glad to become members of it, but they are willing to contribute their service and to back it with their money.

Gentlemen, I feel that this is the opportunity for us as a group to do something that is worth while. We need this great fund that has been raised. Some, perhaps, think it an enormous fund. I was holding a booster meeting the other day in a certain county and said, "Now, if there is anybody here who would like to ask any questions, I will try to answer them."

One good old soul got up and asked, "I wonder what you fellows are going to do with all that money when you get it?" He was worrying like everything.

And I replied, "I don't know how we are going to do the big things that will come up with little dabs of money. Do you know how much the railroad brotherhoods are raising to put through legislation they are interested in? Have you heard how much the packing interests are putting into their advertising campaigns? And would you compare these interests with the farmers of the great State of Iowa the capital they have invested and the things they have to do?"

As a group of business men we should have our paper that will keep us informed as to where we are and what we are doing. It will help to hold us together, to keep us in close touch. It is going to take money to do that. When you men go out in your counties in this clean-up campaign I hope you will bear down upon that phase of the work. In the beginning our organizers were instructed that their joy might be full when they asked for these contributions. Some of them took it literally and they brought home the bacon. It is a good thing for me or any other man to have added something from his store to this great movement. If we do that our hearts will be in it. Now, gentlemen, it has been a pleasure for me to tell you some of the things that have been done, and I thank you for your attention.

ADDRESS BY E. H. CUNNINGHAM

Field Worker

Gentlemen:

I'll promise you right here in the beginning that you are not going to get any more out of me than the actual time allowed in the program. For you are not here to listen to mere talk. You are here for business. You want to know, not so much what has happened as what is going to happen.

Mr. Wooters assigned me a part in this big campaign. So I helped, in a small way, to bring about the consummation in the shape of a big membership. If there is any honor in it there is honor enough for everybody. And gentlemen, if there is anybody entitled to credit it is the men that actually brought home the bacon; the men who stood up against the wire fence and hung onto you fellows until you came across. They are the ones who put this big thing over.

The part assigned to me was a sort of preliminary work, to go into the counties and meet with the boards of directors of the farm bureaus of the state. Sometimes they were hard to find. If there is a place in Iowa that is not on the map Mr. Wooters sent me there. And I had to walk part of the time to get there.

So I went out and met these boards of directors. I was about to say boards of supervisors, and in one instance I did meet the supervisors. These meetings were beneficial in one way at least—it gave the directors an opportunity to get acquainted with each other. That is not overstating the fact. The average farmer was not supposed to have a great deal to do with the proposition, but assumed, naturally, that the members of the boards of directors knew what was doing and what was wanted. But we were to learn that some of the boards had never heard of us, knew nothing about the movement, or what was doing, consequently were not getting anywhere.

This is not said to reflect on anybody, gentlemen, but merely to show the condition that existed in some counties. And now, speaking frankly, unless that big drive that resulted in this great organization has changed your minds and given you new ideas of the federation as a farmers' organization; if you are going to slip back into the rut in which I found some of these boards of directors, this thing will come down with a thud and you will be smothered underneath it.

It was the psychological moment for this organization. Farmers everywhere were thinking alike on the proposition. They realized that necessity had driven them to a position where they would have to take a definite stand in behalf of their own interests. They were ready for it. Some held back, at first, on the $5 membership. It looked pretty big, but on the whole they did very well. I am mighty proud of Iowa and the Iowa farmer.

We went out and sold this proposition of organization as a salesman sells goods. And speaking about salesmen—let me tell you an incident of the campaign:

In a certain county they were giving a banquet preparatory to the county drive. The hotel was full—everybody there. I was sitting quietly in the lobby and remarked to an old gentleman who sat beside me:

"Quite a crowd out tonight, isn't there?"

"Yes," he replied, "And that bunch are all stock salesmen. It's getting to be a hell of a game in Iowa."

Well, I didn't try to disabuse his mind. Later I heard him tell the same thing to three or four others. But I had this consolation; when I was young I had to wear overalls and hand-me-down suits, and I thought if we had such an improvement that a man couldn't tell the difference between a farmer and a slick-looking stock salesman we were making progress.

Now, the organization is perfected in Iowa. It is the biggest and best thing of the kind ever attempted in the state. It is composed of business men, business farmers. And in order to keep it the biggest and best we will have to keep our feet upon the ground and our heads out of the clouds.

There is no room in this organization for radical elements. There is no room in Iowa for radicalism. We are a law-abiding people. We believe in good government, and we propose to uphold the institutions and the constitution of the United States, every man of us.

Speaking for the farmers as I know them, they will never ask for anything but what is right and just between man and man. We know that conditions are chaotic; that the cost of living is sky-high; that the whole industrial situation is top-heavy, but gentlemen, when all the big interests of this country are ready to put their feet under the arbitration table and back up together, the farmers will do their share and go as far as any other industry in the world. But they are not going to submit tamely to insinuations or accusations that they and they alone, are to blame for conditions that exist in this country today.

I thank you, gentlemen, and I appreciate the opportunity, given me through this great campaign, to meet the farmers of Iowa.

ADDRESS BY C. J. FAWCETT

PRESIDENT IOWA FLEECE WOOL GROWERS' ASSOCIATION

Gentlemen of the Iowa Federation of Farm Bureaus:

In undertaking, for the first time, to market the wool produced by the members of the Iowa Fleece Wool Growers' Association I can assure you we tackled a mighty big job. It was a much larger task than any of us had anticipated.

It would be difficult for me to make you gentlemen who aren't interested in the sheep industry realize the importance of this possibility, for Iowa is associated with corn and hogs, rather than with mutton and wool. But there are a few things in connection with this wool proposition and the sheep industry of Iowa that I would like to call your attention to.

While Iowa is looked upon as one of the leading states in the production of foodstuffs is is well to be reminded that the people have also to be clothed. We hear men say, "Let the western range country care for the wool and mutton production of the United States." This has been the custom. You know we only produce 50 per cent of the normal requirements for the United States, and yet there are certain things in connection with the western range that are altering the production of wool and mutton.

The range is being taken up by homesteaders and devoted to grain farming. The recent law providing that 640 acres may be filed on instead of 160 has had a tendency to rapidly deplete the range; therefore we can no longer look for the supply of wool and mutton that has marked other years.

Others say "Why not get our supply from Australia, New Zealand, South America and China, where we already get 50 per cent of the nation's annual needs?" The same conditions prevail in Australia that are to be found in the West. The land is being taken up and devoted to cultivated crops.

It is interesting to note that in the seven years immediately preceding the war the number of sheep in the United States decreased 12,000,000 head, while at the same time the population increased practically that much.

The per capita consumption of wool in this country is six pounds. There is no satisfactory substitute for wool. Cotton is used in connection with it but as a substitute it fails. So, there seems but one solution of the problem confronting us and that is for grain belt farmers to take up the production of wool.

Recently the United States Department of Agriculture inaugurated an educational campaign along the line of "A flock of sheep upon every farm." It is estimated that the number of sheep on the farms of Iowa and other Middle West states could be increased 150 per cent without seriously interfering with the production of other live stock.

We frequently hear it said that the price of wool is so high that it is almost prohibitive; that it is no wonder the price of clothing has increased 200 per cent. While in Chicago last summer I heard such remarks on numerous occasions. Let us consider it a moment. Who in this audience can tell the exact cost of producing a pound of wool? I will confess that, while I have raised sheep and dealt in wool practically all my life, I don't know, and I doubt if there is a man here in this audience that can tell the actual cost of producing a pound of wool. Therefore, upon what do they base their assertions?

The farmer as a business man is entitled to a reasonable profit over the cost of production. Yet we are producing wool for what? We can give neither the cost of production nor the price we are going to receive for it, yet there is not another manufacturer—and that is what the farmer is—that doesn't know the cost of production and the selling price of his product.

Barely eight pounds of wool are consumed in the manufacture of one suit of clothes—approximately eight pounds. On the present market the value of that wool is approximately 50 cents a pound, which would be $4. If we were to make the woolen mills a present of that eight pounds how much would it lower the cost of clothing? It is plain we will have to look for other causes than the increase in the price of raw materials to justify present prices of woolen clothing.

Very early in the conduct of the war the government recognized the importance of wool in the proper equipment of the army. The complete output of wool in the country was taken over and the price fixed approximately 33⅓ per cent above pre-war prices. Cotton, meanwhile the textile that competes with wool in the manufacture of goods, was left to respond to the law of supply and demand, and it would be safe to say that it increased 300 per cent in price.

But we are content with the price, and we are also satisfied with the regulations governing the marketing of wool that were imposed during the war. The wool administrator, Mr. Louis Penwell, a sheep grower from Montana, is a fair man and of broad vision. The plan of marketing as mapped out by Mr. Penwell and his assistant was correct, provided each clip was shipped to a centrally located point and properly graded so that the producer would receive values according to grade.

In some instances this plan miscarried, due to the inability of the government to secure competent men to do the grading. Competent wool graders, it seems, are scarce. At least we found it so this last summer when grading our own wool.

During the International, Mr. Penwell met with the sheep men and suggested that the sheep industry was not securing proper recognition at the hands of the War Industries Board. He advised organization as the best means of protecting our interests. Following Mr. Penwell's suggestion a committee was appointed to draft resolutions for presentation to the War Industries Board. The result was that when the armistice was signed the Board was induced to place the 250,000,000 pounds of government owned wool on the market on the installment plan.

A little later the sheep men of Iowa met in this city and perfected what is called the Iowa Fleece Wool Growers' Association. About sixty-five men were present, charter members, and the organization was incorporated under the laws of Iowa. Little did we think, at that time, that in a very few months this organization would grow to a membership of 3600, controlling and marketing approximately one and a quarter million pounds of wool.

Those of you unacquainted with the details of marketing fleece wool cannot imagine the task we had undertaken. We had hoped to secure 250,000 pounds of wool to market that first year. Instead we had five times that amount. On May 1 we met for the purpose of letting the contract for the sale of the wool, contract to cover grading, storage, marketing, insurance during the period of storage, guaranteed selling accounts and making advancements on consignments as desired by the association committee.

A contract was made with the National Wool Warehouse Commission Company of Chicago, a co-operative concern owned and managed by about 700 western sheep men. This concern has never bought a pound of wool, and probably never will, being strictly a commission firm.

Now, I would like to point out to you the difference between the wool market and the live stock market. Many have the idea that the Boston wool market is an open market where prices are quoted and paid and business deals completed. But such is not the case. In the live stock market one can ship a carload of steers and receive a quotable price, provided the commission men get it. In the wool market it is entirely different. Everything is done by private treaty. The holder of the wool and a representative of the mill get together and bargain. There is no public market, and the wool price quotations you see in the papers are simply somebody's opinion of these private sales.

I would like to call your attention to the benefits of this association to the sheep and wool industry of Iowa. First in getting the government owned wool placed on the market on the installment plan after the signing of the armistice. Next the withdrawal of this same wool from the market during the marketing period for the 1919 clip. Third, a general advance in prices for the 1919 clip, benefiting non-association growers as well as those who were members. This advance was not founded upon the Boston wool market, but was due, we believe, to efforts on the part of wool speculators to discredit the work of the association.

Third is the educational feature. Heretofore the methods of marketing wool have not given the producer a chance to learn wherein the manufacturer is entitled to criticise his product. The good, the bad and the indifferent have all gone at practically the same price. The man who is careless with his sheep and sells clotted, burry wool, received about the same price paid to the man of careful methods, when there is really sometimes a difference of 35 cents to 40 cents a pound in the commodity. The grower had no opportunity to learn the actual value of his product.

So far as Iowa is concerned the wool market is difficult to interpret. The reason is obvious. The government has stated and proven that Iowa wool has been marketed at an annual loss of from two to three cents a pound, due to improper grading and preparation for market, and right here, to my mind, the educational feature was worth thousands and thousands of dollars to Iowa wool growers. I am basing my opinion upon the condition in which the wool was presented in Chicago.

The marketing of 1,250,000 pounds of wool at an average price of 61¾ cents a pound, Boston price, should prove a great financial gain for the wool growers of the state. Again I might mention the improved reputation gained for Iowa wool, for the state has had an enviable reputation in the matter of wool production. It seems the speculators had drawn a line up around Iowa some place—have forgotten just where—and from that section comes the drab wool, the semi-bright wool, that suffers a reduction of from 5 to 10 cents a pound. This has been used as a leverage to secure the entire Iowa output of wool at a reduced price.

One day when the grading of our wool was about one-third completed a Boston wool buyer came in to inspect the clip. He needed 50,000 pounds of quarter-blood combing immediately. He wanted it sacked and shipped the next day in order to keep his mill running on certain contracts. From this you can get an idea of the methods involved in selling wool, and you can readily understand why a community pool or a county pool can not hope to interest mill buyers.

We succeeded in selling this man the 50,000 pounds he required, although others had underbid us. But he wanted good wool. After the deal was made and the wool sacked for shipment he came into my office and said: "I am going to tell you something. I have bought wool for one of the most exacting firms for twenty-five years, but this is the first time I ever bought a pound of Iowa wool."

Naturally that was a great surprise to me—and I know it is to you—so I asked him why he had discriminated against the Iowa product. He replied, "After seeing your line here I have no doubt I have been buying thousands of pounds of Iowa wool, but it has been sold to me in Boston." And he went on to explain that in all that time he wasn't aware that Iowa was producing that particular grade of wool. We couldn't interest him in any other grade at that time, although later we sold six different grades to this same firm; sold it without grading, and why? Because we put up an honest package.

If this organization succeeds it will be on that same basis of an honest package with an honest label. Said this buyer, "If you produce that kind of wool I will be back next year for 500,000 pounds of it." Therefore, gentlemen, it seems to me that here is where the association is going to derive the greatest benefit.

However, I wouldn't have you think that it is all so rosy. There are drawbacks. We have a hard fight before us. One phase that consignors are vitally interested in is the delay in returns. The western men have long ago learned the importance of feeding the market, rather than forcing it. This concern through which we dealt has marketed as much as 18,000,000 pounds of wool in a single year. The western men frequently ship their clips with instructions, "Do not offer my wool until the market demands it."

What does the speculator do? He buys this wool in the country, ships it to Chicago, Philadelphia or Boston, and offers it through the following year as the market demands it. The wool is clipped in a very short period, probably two months in the spring, but it is marketed throughout the entire year.

This is the fundamental principle of co-operative marketing. If we are going to assume the responsibilities of the middle man we must be willing to hold the sack, so to speak, and market the wool according as it is demanded. The middle man has no other reason for existence than to absorb these intervening items of expense. If you market locally the price you receive is calculated to cover all these items of expense—storage insurance, interest on money, etc., and, as the government has proven, a good many profits besides.

The government forced western wool dealers to disgorge $600,000 during the war which had been made in spite of government regulations. The regulations provided for only 4 per cent profit. The question arises what must have been the profits preceding the government regulations, and what have they been since? The other day I picked up a market report from Minneapolis and another from Chicago, and there was a difference of 25 cents on the very same grades of wool. When such variations as that occur how is the grower to know the value of his own product?

The wool market has been a closed book. Through the farm bureau and the Ames College we have been trying to open this book and post ourselves in regard to the actual value of the commodity we are producing. We believe we are entitled to the cost of production and a reasonable profit in addition.

This organization has been attacked from every side. It has its drawbacks. It may be lost sight of, it may change form, but an organization that advocates the marketing of an honest package direct from the producer to the consumer cannot be destroyed and will not be destroyed. Ultimately it will be used in the foundation of a more perfect marketing system.

ADDRESS BY H. C. WALLACE

SECRETARY IOWA CORN BELT MEAT PRODUCERS' ASSOCIATION

Gentlemen:

I am glad to be with you. Mr. Coverdale asked me to come before you and say something about the battles of the live stock shippers, by which, of course, he meant something of the fight made by the Corn Belt Meat Producers' Association.

To tell the whole story of the Association would take a good deal more time than you would feel like giving. So I will touch on a few of the high spots, so you will understand the work it has been doing. I think this ought to be of interest to you, because if I read aright your purposes you will have to carry on this work, and you are better qualified to do it than any other organization.

The Corn Belt Meat Producers' Association was organized in 1905. The thing which brought it about was the notice served by the railroad people that they intended to discontinue giving stock shippers the return pass. That led to a meeting of shippers here in Des Moines. They formed a sort of temporary organization. A committee was appointed to go to Chicago and confer with the railroad management, and another committee was named and instructed to get busy at once with the Iowa legislature.

The committee that went to Chicago met the railroad management and told them: "This return pass is necessary to live stock shippers. It is important to shippers that they go to the stockyards with their stock in order to know that it is properly sold, and to get some idea of the trend of the market, so they will know more about their operations in the future. We don't want you to take away the return pass. It is a part of the freight rate. We regard it as necessary and important to enable the shipper to keep in touch with the market, and if you withdraw the pass you should reduce the rate."

In the meantime we had a law put through the Iowa legislature to provide a return pass. That could only apply to the state of Iowa, but it had a wholesome effect and the return pass was restored.

Then the question arose, should the association that had got these results disband or continue? They talked it over and decided to continue. After two or three meetings of the directors it was decided to make an investigation of live stock freight rates in Iowa. As a result of this investigation it was found that there had been only one change in live stock freight rates in fifteen or twenty years, and that had been an increase.

You older shippers will remember that they used to establish the car rate without regard to how much was in it. Then they weighed the cars for a period of months to find out what the loading was, and when they made the charge it was from so many dollars per car to so much per hundred pounds, and that brought about an increase in the rate. This had been the only change in Iowa rates for fifteen or twenty years.

We brought a case before the Iowa commission and asked for a reduction of Iowa rates. The Iowa law says that rates in Iowa shall be no greater than the rates in similar territory under similar conditions. So we made a study of rates in the state of Illinois and in the state of Missouri as being two states similar to Iowa in general conditions. We found that rates in Illinois were about 23 per cent to 25 per cent lower than in Iowa, while in Missouri we found some of the rates considerably lower and others higher than under our own law.

To make a long story short, we won that case and got a freight reduction of 18 per cent on roads in the state of Iowa. That was about 5 per cent less than the rates in Illinois. The commission ruled that that was a fair differential, because of the heavy traffic in Illinois, and perhaps they were right. As nearly as could be estimated, that reduction made a saving of from $50,000 to $60,000 a year to Iowa stockmen and farmers. We also got a reduction of from 25 per cent to 50 per cent on rates for feeding sheep.

The next year we began the investigation of station rates from Iowa points to Chicago. The Iowa railroad law, passed back in the eighties, makes it the duty of the Iowa Railroad Commission to at once undertake to reduce any rates which Iowa shippers must pay if they are higher than rates which shippers in other states are required to pay, those states being where shipping conditions are the same.

We found a most interesting condition with regard to rates in Iowa, and I want to show it to you in the form of a chart. These are the rates on cattle as they prevailed at the time we attacked that case. You will notice that they start over on the Mississippi River at 14 cents a hundred pounds. Then they advance every time the train stops until they get into a large, 21-cent zone. The next is a 22-cent zone, followed by a very small 22½-cent zone. Then you will see that the rate for cattle from the west half of the state was 23½ cents to Chicago, while up in this northwest corner they run to 25 cents.

We studied the rates from other states to Chicago. We took all of the rates from Wisconsin to Chicago, and we took all the rates from Iowa to Chicago, every twelve miles across the state. We took the rates from Wisconsin to Chicago and from Missouri to Chicago. We found the rates very much lower with a tremendous differential at Kansas City. It was a hard fought case, but here is the approximate result:

You will notice, over in this nose that sticks out of Iowa into Illinois, that it is not practicable to make them without changing the Illinois rates, but when you get away from that locality you will note a change. The regrouping of rates made a very substantial change. It threw the 23½-cent zone clear over to here (indicating on the chart). We weren't able to get a reduction in that corner, but it was a very substantial difference elsewhere, as you will see. The saving to shippers, as near as we could estimate, was from $100,000 to $150,000 a year, depending, of course, upon the annual shipments of stock, and that saving has been continued ever since. At the same time we got a ruling from the commission putting in the cattle rate and the cattle minimum on double-deck cars for sheep, which was a very substantial saving for our men, especially in the Northwest.

Along with fighting these rate problems the officers of the association took up and approved other matters of interest to live stock shippers and farmers. For example, the commission charges and practices in Chicago, the use of the Bubbly Creek water which cattle would not drink and consequently did not get a decent fill, and other things which I might mention, but your time is too short for them.

Shortly after we organized we had a talk with Mr. Thorne, a young lawyer down in Washington county. Thorne had not given any attention to railroad rates at that time but he had been studying certain oil rates. He became very much interested. He was our attorney in both the Iowa rate case and the Interstate Commerce rates, and it would be amusing to hear how much we paid him for that work. We paid him for that Iowa case the grand sum of $200, while the rest of us worked for nothing, and we paid him nothing for the Interstate Commerce case.

In 1910 when the railroads were going to put on a general advance in freight rates, we had been accumulating evidence, and I think Mr. Thorne is entitled to the credit of preventing that general advance in 1910. We had the organization by that time, and were able to speak with some assurance on the question of railroad rates.

This work was carried on by a mere handful of men. I don't remember just what our membership was in this state, not much over 1500, I think, and they contributed ten, twenty-five, fifty or a hundred dollars each. The members of the association gave their time. I see Mr. Ames, the first vice president of the association, here in the room. He gave his time without charge and had a very small expense account. And it came to us that we were doing a work which while of benefit to those contributing to its support, was of exactly the same benefit to those who were not contributing and to the state at large. In other words, it is just as much benefit to the business men of this state that the farmers have fair freight rates as to anybody else. It simply saved that much to the state.

We concluded that the Iowa Railroad Commission should become the active body—the law made it necessary—and yet I doubt if a member of the commission at that time would have known a freight rate if he had met it coming up the street. I had in my office at that time a more complete book of Iowa freight rates than the commission itself had. So we decided that the railroad commission should be reorganized and placed upon the sort of basis where it could do business for it. The result was we persuaded Mr. Thorne to run for railroad commissioner and put the office on a business basis.

You know the history of that, and since that time the railroad commission has had a complete file of railroad tariffs, and you can get a rate from Iowa points to anywhere else, or from anywhere else to Iowa points by simply dropping a line to the department. You now have a working organization and it dates from the time Mr. Thorne went in there.

At that time the law required that the railroad commission should assume the entire burden for securing fair rates for Iowa as compared with points in other states. We had been doing this through an attorney employed by a small group of farmers and stockmen. It was a benefit to everyone, so why shouldn't the state employ an attorney to act for all?

So we drafted what is called the commerce counsel bill, provided for an official who shall work with the railroad commission and whose duty it shall be to look into all matters of freight rates, to represent the people of Iowa before the Interstate Commerce Commission, before the Iowa Railroad Commission, and in the courts wherever our rates were at stake. They beat us on that the first year, and then the second year, but by the third year there were quite a number of Corn Belt Meat Producers in the legislature.

The association never went into politics, yet quite a number of our members became interested in local communities—perhaps the association was guilty of contributory negligence in permitting them to get in—and that year we got the commerce counsel bill through and Judge Henderson of Indianola was appointed Commerce Counsel.

From that time on we have had efficient help from the Commerce Counsel and the Railroad Commission. When the proposal came to cut out 75 per cent on the feeding cattle and hogs the commission was well organized for work. The railroads served notice they would cut that out. Judge Henderson and Mr. Sykes were the chief men to make that fight. They beat the railroads on it, and as near as I can estimate resulted in a saving every year since that time of right around $300,000 to Iowa feeders. That is almost as much as you have raised this year.

I want to tell you of the activities of the association in fighting the general rate advances in 1915-17. I was in Chicago that time when we were getting ready for it, and Mr. Thorne, the country lawyer that we had hired for $200 the first year to fight our battles, was the chief attorney in that fight. I went with him one night about midnight to three different hotels, and during that trip around we found something over a hundred clerks and statisticians hard at work at midnight working over exhibits, all under the direction of Mr. Thorne. It was quite a growth from the country lawyer to the chief of this great controversy. If that proposed advance in 1915 had gone through it would have cost Iowa at least $2,000,000 a year, but it was defeated by Mr. Thorne's efforts, and I think the Corn Belt Meat Producers' Association is entitled to some share of the credit that the advance was defeated, also the later advance in 1917.

Now, there is one thing to note in connection with all this. While we were making the fight on the stock rates in Iowa, and the fight on stock rates from Iowa to Chicago, never at any time was the question as to the fairness of these rates brought up. Our fight was made, not on the question whether the roads were getting a fair return for the service, at all; it was made on this question: that Iowa was being discriminated against compared with shippers in other states.

We said: "If you can make rates from Missouri to Chicago for so much; if you can make rates from Wisconsin to Chicago for so much, then Iowa is entitled to rates of so much." It was on that that we got the re-grouping and a considerable reduction. The later advances asked for in 1915 and in 1917 were asked for on the basis of reasonableness, and the fight there was on a wholly different set of issues.

From now on—and this is a matter that I want to make plain—this whole question of railroad rates is likely to be approached from the standpoint of fairness of returns to the railroads. Now, you see there is a tremendous difference between making a fight on the basis of discrimination and making a fight on the basis of reasonableness of returns, and it is going to take a lot more work to prepare a case on the latter issue than on the former.

I bring your attention to this point because you people are representing the only organization that I know of that can make the fight, that have the money to make the fight, and are prepared to build up the organization necessary to carry it through. It is not going to be an easy fight. It is going to be a very difficult one, yet a tremendously important one, because the change in a railroad rate will move your farm 100 miles or 200 miles nearer the market, or 200, 300 or 500 miles farther away from the market. As land goes up and expenses increase, a little change in rates may make all the difference between profits and loss in your business.

So, as I look at it, in the next three, four or five years, there isn't any other question that will carry as much financial importance to the farmers of Iowa as this question of railroad rates. During this war period the railroads have been under the control of the government and we have not been able to do anything. Probably the railroad bill now pending will be passed before March 1, and then this whole question of rates will be once more thrown open before us. The railroad people are on the job. They are studying all these things. The Iowa farmer will have to be on the job much more efficiently than he has ever had to be before, if he expects to get a fair deal compared with the farmers of other states, and also based upon the reasonableness of returns to the railroads.

Now, what is the lesson you can draw from the experience of the Corn Belt Meat Producers' Association? As I see it it is very clear. The association succeeded because it studied the game. When Mr. Thorne, acting for the association, went before the Iowa Commission or the Interstate Commerce Commission he went loaded with the goods, with definite information. He knew exactly what he was talking about. It was the result of weeks and months of study, of the work of a great number of clerks and statisticians, and he was loaded to meet the railroad people on their own grounds.

Let me give an illustration of what I mean. In the Iowa rate case Thorne and I did what work we could—prepared the exhibits ourselves.

We had no money to work with and no other help. We studied the Missouri rates that I have spoken of. Now, in Missouri at that time some rates were fixed by the legislature and some were fixed by the railroads themselves. When we ran onto that I wrote a letter to the secretary of the Railroad Commission in Missouri and got a statement from him with regard to the rates fixed by the legislature and those fixed by the railroads. In other words the statutory rates and the voluntary rates.

I filed that letter away with my papers. On the stand one day I introduced one of those Missouri rates, and after I got through the attorney for one of the railroads said something like this:

"Mr. Wallace, this testimony has been quite interesting. Evidently you have put in a good deal of work preparing these figures, but I am sorry you didn't speak to me about it first. You have assumed that these rates in Missouri which you have shown to be lower than the rates in Iowa are rates fixed by the railroads, haven't you?"

I said, "In most cases, yes."

"Didn't you know," he questioned me, "that those rates are fixed by the legislature and not by the railroads?"

"No."

"I don't mean to doubt your honesty," he went on, and he was as keen and suave as you please, then turning to the commission, "These rates are fixed by the legislature and the railroads have nothing to do with them."

Well, I knew better, but I thought I would wait until I had the evidence. That letter was in my office, instead of in my pocket, and as it was noon the case was adjourned. Instead of going down to lunch in the state house I went to the office and got the letter from the secretary of the Missouri Railroad Commission. During the afternoon session I went on the stand, and I said, "I would like, before we go into any further matters, to make a statement about those Missouri rates." Up jumped the lawyer and said: "I want to make a statement about that too, Mr. Chairman. After adjournment one of my colleagues spoke to me about it. It seems I was a little hasty about what I said."

Just headed me off, you see. He knew well enough he was lying about it, but he thought he would catch me off my guard, don't you see? And they did that all the way through. They were nice gentlemen, but they were playing the game from their own standpoint, and the message to you gentlemen is that you have got to be loaded and ready to play it from your standpoint.

It is like trying to buy a horse from your neighbor. You make up your mind just exactly what you think the animal is worth, and you don't get together on a basis of good fellowship or anything else. If you cannot agree you don't trade. You have got to follow the same policy. You have got to get your facts and then fight for them.

Now, in every organization like this—we have it in the Corn Belt Meat Producers' Association—there are three general classes of men. First, there are the radicals. They cuss and damn the middleman or the fellows they are fighting, just on general principles. They relieve their feelings and that is about all they get out of it.

Second, there is a large number of conservatives. They say, "Now, look here; what's the use of fighting about this? Let's get together and talk it over. When we talk it over we will find they are the same sort of people we are and we can iron out all our difficulties." They are the ones who want to confer with the railroad, and with the packers, and thresh things over. I have been in conference with the railroads and the packers and the commission men and other interests for twenty years, at different times. I can sit down the night before any conference is held and write an accurate account of it as it will be held the day following. And I would do it without hesitation and stake my reputation that it would prove a fair report of the conference.

The good fellows who want to get together find these other men are nice fellows, that they are exactly the same sort of men we are. They are gentlemen. But while they are patting you on the back they will be playing their side of the game, always, and you forget you aren't playing your side of it, because you haven't gone there loaded and ready to fight. This is a business proposition.

The third class are the practical men who know what they want to do; men who have prepared themselves to represent their interests and the interests of their fellow members. They are just as decent as the other fellows but they are standing all the time for what they went there for, and that is the basis you will have to go on if this organization is going to get anywhere.

I have said in the paper and many times publicly that I regard this farm bureau movement as by all odds the most promising, the most successful movement of farmers ever started in the United States. I had lunch today with a man representing one of the great New York magazines. He came out here to learn about this farmers' movement, and he had a sort of notion that the farm bureau movement was something of the bolshevic order. He had traveled all over the world. He had been in France and everywhere, except in this Central West, I guess, but he seemed to have that sort of idea. I tried to set him straight.

You have made a wonderful start. You have raised a big sum of money. You have a thoroughly representative membership of the best people on the face of the earth. You have done a big job and done it mighty well. Now you have got to get down to business. You have got to make sure that you deliver the goods, that you live up to the reputation you have made for yourselves.

You will do all these things if you get down on a business basis, studying the game, hiring expert men to do the things you cannot do yourselves—and there will be a lot of them—statisticians, clerks, expert economists, set up an organization that will go into railroad rates, railroad operation, merchant marine and our relations with foreign countries.

All of these things have a tremendously vital influence upon all this western farming country that is going to make or unmake the farming of these western states. You are the only farmers that are truly the representatives of the farmers of this great corn belt, and to protect these interests you must call about you the most expert, thoroughly trained men that you can find in the United States. I thank you for your courtesy.

PAPER BY R. A. PEARSON

President Iowa State College of Agriculture

Gentlemen:

I congratulate you upon the wonderful showing in membership and accomplishment up to this time. I do not know of any organized effort relating to any subject that has gone forward so rapidly. To me this indicates very clearly that the farmers have faith in the farm bureau movement. The organization, they believe, will care for a real need in agriculture. More than one hundred thousand members in this state represents a very large portion of our total population. What such an organization does will affect the whole state.

It is proper to recall the different steps which have led to the present strong position of the organization. Before the war county farm bureaus were organized in connection with extension work in about twenty-six counties. There organizations were developed rapidly and very largely with the encouragement and aid of the county agents and extension workers. Before the war about fifty other counties were considering the organization of farm bureaus and plans were more or less advanced in each of these counties. It seems that everyone believed in this movement and wanted to help. During the war all of the remaining counties in Iowa were organized and an announcement was made from Washington that Iowa was the first of all the states to have a farm bureau organized and at work in every county. This was an example and an inspiration to other states.

A great service was rendered by the county farm bureaus. It was largely due to their encouragement that Iowa, with a decrease of 50,000 farm workers, produced an enormous increase of food products. It was largely due to such organizations thruout the whole United States that this country produced about one billion bushels of food crops in 1917 in excess of production in the average pre-war year.

The benefits of farm bureau organizations co-operating with the agricultural extension service, and the agricultural colleges and the federal Department of Agriculture were so well recognized that the federal government made available millions of dollars for further developing extension work and organizing and encouraging farm bureaus. States assisted thru appropriations and especially thru aid from the agricultural colleges. Many counties also contributed from their public funds as permitted under our own laws at that time. The strength of farm bureaus today is largely due to this early federal and state support made available thru the extension service.

The great development of this movement was in response to our country's need for all the food that could be produced. It was necessary to help win the war, and so every loyal citizen was interested in the farm bureau movement. Farmers themselves were interested because thru these organizations they were able to secure and more widely apply the best available information relating to their work.

The war has been won and many questions have arisen as to what will be the future service of individuals and organizations. In line with this thought I have been asked to say something about the "Aims of Extension Work."

Extension work will develop along the lines described by the large body of clear-thinking farmers. It will be what they want it to be, and this in turn will depend upon their ideal for agriculture.

In Iowa our ideal can be briefly and and definitely stated. We would have Iowa maintain her leadership in food production and excel in all phases of rural life and work. Providence has been good to us and we should respond generously. We would have farming in this state on the most eficient basis possible, including the production and disposal of farm products. We would have the smallest per cent of tuberculosis, cholera, smuts, rust and blackleg, and other such serious drawbacks and leaks. We would have the best animals and plants; we would have the largest production per man with the reasonable profit for his work, and with proper regard for the maintenance of our soil fertility. We would have comfortable homes thruout the country, good roads, good schools, good churches, and in a high level of community endeavor. We would have efficient research into new agricultural problems and thoro instruction in all phases of agriculture.

Such are our ideals! How should extension work be directed to help realize these ideals?

Extension work simply means the extending of the college to the people of the state. But in this extended form it is still an agency for education. Its service to the farm bureau is, in the nature of the case, along the line of their educational endeavors. At this point it is not out of place, I think, to say that I believe these educational efforts are destined to be the real foundation of the permanent success of the farm bureau movement. The fact that your state federation has seen fit to establish a standing committee on education as one of your four main lines of work shows clearly the importance which you attach to this matter. Educational endeavor should be given a prominent place in the program of every county farm bureau.

I look forward to see the farm bureaus wield a great influence in this state. But they will not do this primarily by force or because of great numbers or financial resources. Rather I expect them to become a great power because in their township and county groups and in their less frequent state-wide meetings they determine by discussion and careful investigation a thoro understanding of the facts and forces which concern the business of farming. Only upon such a basis can they adopt wise and sound policies.

I feel that we all agree that whatever is accomplished toward meeting the ideals referred to it will be done chiefly thru education.

For the purpose of this brief paper, extension work may be divided into three parts:

> Service which leads to better farming and thus enables farmers to best perform their function of feeding the world.
>
> Service which will secure for the farmer such assistance from other persons or institutions as he is entitled to receive.
>
> Service to our country.

Other kinds of service might well be referred to, but these three seem to comprehend the main features of extension work in the immediate future.

As to extension work in its relation to better farming, we will remember the benefits that have come to individuals and to communities and to the nation from the strictly agricultural educational phases of extension work, including the work of county agents in the fields and barns and the work of demonstration agents in the homes and the work with boys and girls who are to be the future farmers and home makers.

Extension work owes its present strong position among farmers and the public very largely to what has been done along these lines. Such effort will of course be continued, and with the co-operation of farm bureaus they may be made much more effective. The farmers of Iowa, thru methods advocated by experts including many farmers themselves, should save, for example, a large part of the twenty-five million dollars lost annually on account of plant diseases. If investigational work and educational work are not continued these losses will become larger rather than less. Thru the elimination of such losses the individual farmers secure direct and very large financial gains. Of course, we are all interested in these savings.

It will not be amiss here to point out that every industry has its constant procession of new difficulties and every large industry has its corps of experts to contend with these difficulties and advise ways of overcoming them. Manufacturers, sometimes thru associations, expend millions and millions of dollars in these ways. Commercial interests do the same. The experiment stations represent the farmer's means for learning about many of his most difficult problems.

The question which now disturbs those who are engaged in experiment station work is whether we are maintaining this work on a large enough and strong enough basis to keep up with the new difficulties that are constantly arriving on our farms. Just now the corn borer looms on the eastern horizon. If it should enter Iowa and do what some of the most eminent entomologists fear it would do, our losses would run very high in the millions of dollars. With so much at stake would it not be economy to appropriate a large sum, if need be, to learn about this threatening pest and try to ward it off? Of course some work is being done but are we doing enough? We all hope the pest is not as serious as some think it may be, but we ought to know as soon as possible.

Other technical problems are in need of much more attention than they are getting. In recent years also there has developed a whole line of problems related to the business side of agriculture and including those in the field of primary marketing. The solution of these problems comes down generally to a question of funds available for doing the work.

It is proper to mention these things here because the effectiveness of education thru extension departments rests squarely upon the promptness and value of investigational work which must be carried on by highly trained experts with special and frequently expensive equipment. The value of such service will depend largely upon the continuation of co-operation and support on the part of the farm bureaus.

The kind of extension service which results in larger food production, larger economies and reasonable returns to farmers is of direct interest to urban people. We should not fail to let everyone understand that consumers, more especially those in cities, have more direct interest in maintaining food production than the farmers themselves, because the city people get only the surplus which the farmers do not need.

Better farming means better homes and communities. Improvements along these lines which have been so noticeable of late are closely allied with up-to-date education, as is well known to the best informed farmers and agricultural editors as well as to extension workers.

Secondly, service to farmers from persons and institutions. Here the extension workers in co-operation with farm bureaus have been able to accomplish a great deal. Efforts have not and will not be made to crowd out legitimate business. Our workers have pointed out excessive costs in handling articles needed by farmers and unnecessary margins between prices received by farmers and paid by consumers, and they have indicated methods for correcting these defects which often have been accepted by those concerned, and greatly to the benefit of the farmer.

For example: The assembling of orders for feeds, seeds, or binder twine and placing this business thru the usual channels on a cash basis has eliminated excessive costs to the advantage and satisfaction of all concerned. I have heard prominent farmers say that they would prefer not to engage in business which must be conducted largely at places far distant from the farms, and they will not engage in such business if they can receive efficient and fair treatment. Securing such treatment is a service which is comparable in importance with the service relating to economical production. If satisfactory treatment cannot be secured from others then farmers must organize ways to get it.

In the third place, extension work needs to serve our nation in respect to some things which have become very prominent during the last few weeks and months. I refer to the recently discovered efforts to overthrow our government. Some one may say these efforts are not serious because only four or five thousand people were involved and they could not do much in a nation of one hundred million.

If there is one person in this country who is using his intelligence and energy to overthrow our government, that person is a serious problem, and every good citizen should be interested in prompt and efficient measures to take care of that problem. No citizens are more patriotic as a group than the farmers. Foreigners who have come into thickly settled portions of this country and have secured a considerable following and have felt that the hour soon would arrive when they could take possession of our government and substitute a government of their own which knows neither law nor justice, overlooked some important items, and one was that this nation has a tremendous body of self-respecting, patriotic farmers who do not believe in revolutions and who will not permit their homes, their property, and the safety of their families to be endangered in these ways.

It may be very significant that the county farm bureaus have developed so steadily and so rapidly and now that we have strong state organizations which in turn have effected a national organization. These farm bureaus in co-operation with extension service which is supported by the federal and state governments have an enormous responsiblity in maintaining our food supply, in developing our agriculture along permanent lines, and in ways that bring fair returns to the producers, in preventing imposition upon farmers, in promoting rural life, and, perhaps chief of all, in helping to drive out un-Americanism.

Let us hope all these things can be accomplished thru education and peaceful co-operative efforts. It would be difficult to overstate what can be done thru the joint efforts of the farm bureaus and of the federal government and of the colleges which are sending out so many trained young men and women as well as devoting themselves to extension work.

ADDRESS BY A. B. JUDSON

State Master of The Grange

Mr. President:

I want to congratulate the officers of the Iowa Farm Bureau Federation on the success of the campaign that has just closed. I have been asked to talk to you about The Grange, the first real farmers' organization the world ever saw, the first organization the farmer ever had to champion his cause, the first organized body of farmers to secure recognition in our legislative halls.

More than half a century has passed since this great organization came into existence, and during that time it has been the leading factor in developing and raising to a higher standard the business of farming. During this time other farm organizations have sprung up and flourished for a time, but The Grange still stands as a monument to the founders. The wonderful and lasting benefits that have been accomplished for agriculture and humanity cannot be estimated. The Order of Patrons of Husbandry has not lived, grown and thrived simply for the benefit of its members, but has always taken a broad and comprehensive view on all great questions for the advancement, benefit and uplift of humanity, to make our country a better place to live in and bring up our families.

In attempting to secure legislation that would be beneficial to the agricultural interests of the country and so give the farmers an equal and fair chance with other great business enterprises, we as an organization have always been mindful of the rights and interests of others. When men high in political life and those in executive authority really understand what this order stands for and its aims and purposes, they will readily give greater consideration to what is said when our leaders speak. We, as farmers and leaders of this great organization, have a right to be, and are, justly proud of our profession, for agriculture is really and truly a profession, equal, if not superior, to any other profession or calling, and one on which success in many other lines of business depends. It has been truly said that when agriculture languishes all other business declines.

No order of the present time is, or is likely to be, able in the future to point to greater achievements during the first fifty years of its existence than the great Order of Patrons of Husbandry. It has possessed the power within itself to withstand all unjust and adverse criticism and vituperation that was heaped upon it in its early history, and has come out unscathed. We can never forget and will always appreciate the wisdom and foresight of its founders, who builded better than they knew. Today we are reaping the benefits of the heritage handed down to us. May we ever uphold its dignity and prove ourselves worthy of the trust committed to our care.

The work of The Grange is of such a nature that its greatest accomplishments can never be cited only in a general way. We may state how many dollars have been saved to the farmers of the country thru co-operative trade arrangements, and thru mutual insurance companies, both fire and life, and something definite can be stated in regard to the vast saving to the farmers of the country thru wise legislation secured and unwise legislation defeated thru the influence of The Grange; but when we undertake to make an estimate of the moral, social and mental development that has been brought to the farmer and his family thru Grange influence and Grange teaching, we are lost in the magnificent results obtained.

It is absolutely impossible to give any intelligent estimate of the development of the noble principles of manhood and womanhood in the minds and hearts of millions of people who have been connected with this order, and of the millions of other people with whom they have been associated. It is along this line that the grandest results have been achieved. Thousands of farm homes have been made happier and better, and the member of farmers' families have been reaping the highest enjoyment of life thru the quickened mental abilities by Grange influence, while the higher ideal in life has been reached thru the development of the heart by true Grange teachings.

In matters of legislation, among the first objects to claim the attention and engage the efforts of The Grange, were the state agricultural colleges of the country, many of which in their earlier days were united with and became a part of classical colleges and universities, thus in a large measure destroying their identity as agricultural colleges and rendering them practically worthless for the objects for which they were established.

Thru the influence of The Grange a separation has been effected in a majority of states, and district agricultural and mechanical colleges have been established. In most of those states where efforts for a separation have not been successful, the college authorities have been forced to give much greater recognition to agriculture, and these institutions, separate and combined, are now doing grand work in educating the farming youth of the nation along the lines of scientific agriculture.

It was thru the direct influence of The Grange that the additional appropriations for agricultural colleges by the 1890 Act of Congress were confined to instruction only in agriculture and mechanical arts.

The Hatch Act for the establishment of state experiment stations, which are doing such a great work for agriculture, became a law by reason of the efforts of The Grange to secure its enactment.

It was thru the direct influence of The Grange that the Department of Agriculture at Washington was raised to the dignity of other departments of the national government, to be presided over by a secretary of agriculture in the President's cabinet, thus giving the farmers a voice in the policy of the government as it effects the agricultural interests of the country.

The transportation question engaged the attention of the members of The Grange in the early days of the order, and in the famous cases in the central west decisions were handed down from the Supreme Court of the United States that all railroad franchises are subject to the power which created them. Or, in other words, that "the creature is not greater than the creator."

Thru the direct influence of The Grange the Interstate Commerce Commission was established by act of Congress, which aims to control interstate traffic, and gives the people a means of redress from the injustice and extortions which are often practised by those gigantic corporations, thereby saving the people great annoyance and vast sums of money in reduced rates of transportation.

The subject of taxation has always engaged the attention of The Grange, and it is thru the influence of this farmers' organization that in many states the burdens of taxation have been in a measure, at least, equalized by a more equable assessment of real estate between farm and city property and corporations which had hitherto paid little, if any, taxes for local or state purposes.

The Grange is strenuously opposed to adulterations of all kinds, and mainly thru its influence state and national laws have been enacted to control the sale of oleomargarine and other butter frauds, and to protect the great dairy interests of the country from these compounds which the unscrupulous manufacturers would place upon the market as pure butter.

The Grange successfully fought the driven well, the sliding gate, and the barbed wire patents in the courts, saving enormous sums of money in royalties which were being extorted from farmers and others using them.

In its very early history, thru the influence of The Grange upon Congress, the extension of the patents on sewing machines was prevented, saving the people fully 50 per cent in the prices, amounting to millions of dollars annually.

The Grange has a grand record of usefulness in legislation in nearly every state in the Union for its influence on the side of justice and equality in the enactment of many wise and judicial laws in the interest of the people, and for the protection and advancement of farming industries.

A more recent victory of The Grange, and one of its grandest achievements of rural mail delivery in all sections of the country. The Grange was the first organization to publicly proclaim that if it was right for the government to carry mail to the homes of the people in the cities, it would be right for it to carry mail to the homes of the people in the country, and thru the discussion of the question an intelligent presentation of the matter in Congress, appropriations were secured, first for experiment, then for permanent establishment of the system of rural mail delivery. This breaks up the isolation of farm life, will tend to secure better roads, and to advance farm values wherever it extends. The results in this matter alone will justify the entire cost of The Grange from its establishment to the present day.

Every man is a factor of society, and as such he is accountable for the manner in which he performs the duties which devolve upon him.

The first is to his home and family. The second to his government that permits him to enjoy the blessings of home and family. The third is to better the conditions and advance the interests of his chosen occupation.

Since we are looking at the farmer's side of the question what should be his action and what can he do to better his condition?

There are certain conditions existing that must be met and overcome to obtain results desired by the farmer. What legislation is needed must be secured by his combined efforts. As an individual among millions of people he is hopelessly helpless to do one thing to obtain relief.

The moment the farmer attempts to relieve any burden created by unjust taxation or unequal distribution of it, it makes no difference in what direction, he is met by an organized force. No argument is needed at this time to convince any intelligent farmer that such is the case.

It is not enough that he complains and wants something done. He is morally bound to do something himself and not merely wish it done. He has the power and it is his duty to use that power so as to make it available and his influence felt. So that if he cannot make his influence felt or his power available as an individual—and he cannot—his duty is to make it so, and that can only be done thru his organized efforts.

Every farmer owes it to society to assist in securing honest legislators and just representation. That a lethargy exists among farmers in regard to political duties is evident from the class of legislators that represent them, composed as it is almost wholly of men from other professions and possessing but little interest in the affairs of the farmer.

The farmer has submitted so long to the powers that be that in many places he has lost confidence in his ability to do anything, and above all he needs the stimulating influence of a farm organization to awaken his energies and give him courage. To do the work assigned to him as a citizen he needs an understanding of the questions of the day; he needs a preparation that will enable him to act in the management of the affairs of his time. In short he must be able to stand up and defend his interests whenever and wherever it is required, and his ability to think quickly and act courageously only comes from the drill obtained in organization, and a farm organization teaches him to have confidence in his fellow farmers and acquaints him with the vital questions affecting his interests.

The farmer was created a social being and needs the wholesome influence of organization to keep him so. His business is comparatively one of isolation, varying in degree according to environment. The farmer who lives within the boundaries of 160 acres becomes very narrow and is of little use to his community. His family is correspondingly dwarfed, as they are shut out of society, and are improved as their opportunity for association increases. The individual excluded from society will in time lose his mental powers and become oblivious to his own needs as well as to the needs of others. Here again he needs a farm organization where he and his family can meet with freedom and ease, and while cultivating sociability can secure mental culture.

Without further arguments all agree that the farmer needs to organize, and without any hesitation we say The Grange is the best organization. Its Declaration of Purposes is as fine a document as we have ever seen written by man. Its application to farm life and the fine sentiment contained cannot be surpassed. With its existence of over fifty years, in which time it has met the surveillance of every opposition, it has not been found wanting in any particular. It has stood the test, while many other organizations which have sought to improve upon it have met with disaster and ruin. The plan of The Grange is right in being made coexistent with the needs of the farmer, having an organization in the township, county, state and nation, whereby it is able to serve him in every sphere. Anything short of this is deficient.

The Grange may be called the liberator of the American farmer's wife, as it was the first organization that gave to woman the same rights and privileges as are enjoyed by man. In doing this it has not only turned on the radiant light of hope for her, but it has strengthened the union of both, has created deeper love for home, and given inspiration for better thoughts, nobler deeds and higher aims for the future. Men need more of the refining influence of women. There is nothing that so refines a man as a good woman, and no audience, association or organization with woman eliminated can be so modest, so refined or so complete as with women in it.

There is nothing equal to The Grange in giving opportunity to the boys and girls on the farm. Here the latent ablity of the boy is awakened and hope engendered until we see him developed into a fuller and more complete man. In doing so he takes greater pride in his work, more interest in the farm, and his attachments for it are increased many times. The girl, now, has opportunity and her genius brightens, while her refined nature responds readily with graceful manners and a greater affection for all that is near and dear to her.

The agricultural education of the farmer has been sadly neglected, and the results obtained in this direction are among its grandest achievements. The Department of Agriculture, Experiment Stations, the Mechanical and Agricultural Colleges, bear testimony of this fact. In many localities consolidated and high schools have been established and a better condition of common schools fostered by the efforts of The Grange, while within The Grange a knowledge and discipline has been imparted that has gained for farmers a prominence that was unknown before. Men have been fitted thru the Grange for the press, for the platform, for the caucus, for the assembly and for statesmen. Truly The Grange is the practical high school for the farmer and his family, as it gives strength and culture to those who were not able to secure them elsewhere.

The impress of The Grange upon its members has a great influence for good. It makes better men and better women and incites all to a higher place in life. It teaches Divinity in all things, and a Grange is never properly opened or closed that each member does not pay tribute to his Creator.

The Grange is not without good results in teaching better business methods for the farmer. It has taught him so far as possible to buy and sell for cash, and to sell less grain and more livestock. That this has been the wisest course is borne out by past experience. The Grange has cultivated close relations between the farmer and the manufacturer that undue profits may be eliminated, and much good has come to all farmers thru this effort.

While The Grange does not teach partisan politics it does impress its members with the responsibility of citizenship and to do all in their power to secure purer politics and to see that the interest of the farm is fairly represented. The continued and just demands of The Grange have met with no small degree of success and in about every instance has been the only agent the farmer has had to present his claims to see they were granted to him. Scarcely a law has been passed for many years in behalf of the farmer that The Grange was not foremost to champion it and oftentimes the only one.

If the farmer hopes to keep pace with other callings in the race of life he must travel at the same rate of speed. The farmer should see that his labor and farm produce should go for the benefit of his family. In short to introduce the best business methods in the distribution and sale of the products of the farm. The farmers must depend upon themselves to do this work. They cannot expect others to aid them, even by suggestion. They must adopt and apply the same business methods used and so successfully applied in all other lines of successful business. To accomplish this organization, thought, energy, knowledge and business qualifications must be wisely applied. In the past farmers have allowed others to organize business methods and do the thinking for them. So long as this practice is continued the farmer will fail to realize his just share of what the harvest yields. Any people or any business that permits or allows those with whom they deal to fix the price of what they sell or buy, will become servants of the one who fixes the price.

We are not unmindful of the great interest that business and professional men have taken in the welfare of the American farmer during the last few years, and we realize that they are entitled to great credit for their willingness to assist the farmers with suggestions and money, urging them to apply more scientific and economic methods in the production of their farm crops, and to the end that they may purchase these crops more abundantly and cheaply, in their interest, as well as in the interest of the general public.

For many years the government, the business man and the farmer have joined hands in working out more successful and economical methods of farming, hoping that the farmer may be able to produce more abundantly and more cheaply in the interests of all the people.

That is true co-operation, the kind of co-operation that benefits all the people. Then why not continue this kind of co-operation along business lines, and ask the business and professional men to co-operate with the farmers and the government, to make a thoro investigation of business conditions, to ascertain if the business of distribution of farm products is done as scientifically and economically as it might be; to investigate conditions in the business field and if possible increase the efficiency of the business men, and thus reduce the cost of the necessaries of life; to ascertain the amount of needless capital engaged in business enterprises that the public is expected to pay dividends on; to ascertain the amount of needless help employed in the distribution of food products, thus increasing the cost to the consumer; to ascertain why the farmer receives only 35 per cent as much for what he raises as the consumer pays for it?

Why should the government spend millions of dollars annually to teach the farmer how to maintain the fertility of the soil, and to increase his efficiency, so as to cheapen the cost of production, and not be allowed to investigate the conditions of the business field, and possibly increase the efficiency of the business men, thereby reducing the cost of distribution?

The question of distribution and marketing of farm products will soon be pressing for solution, and I would suggest that you give it careful consideration. It should be our earnest desire and we should endeavor by all honorable means to "bring producer and consumer, farmers and manufacturers, into the most direct and friendly relations possible. Hence, we must dispense with a surplus of middlemen, not that we are unfriendly to them, but that we do not need them. Their surplus and their exactions diminish our profits."

We have been hearing a great deal about the high cost of living, with the opinion often expressed that the farmer is responsible for the high prices prevailing for food stuffs. If we stop to consider, there are many things that contribute toward high prices. First, the shortage of crops caused by adverse weather conditions. Second, the increase in population of nearly two millions a year. Third, the greatly increased consumption caused by reason of the better financial condition of the millions of people who are being paid higher rates of wages than ever before in the history of the country. Fourth, the increased foreign demand caused by the war.

These are all legitimate reasons, none of which the farmer is responsible for. True, as compared with former years, the farmers are prosperous, and why shouldn't they be? But if you will compare their prosperity with the prosperity of the great industrial interests of the country, which are paying enormous dividends on their capital invested, you will find the farmer a pauper in comparison. I will venture the assertion that the average net income of the farm lands of this great agricultural state will not exceed 4 per cent on the selling price of the land. The farmers of the country have never had their full share of prosperity as compared with industrial interests. The farmers' work has not been confined to eight hours, unless it was eight hours in the forenoon and eight hours in the afternoon. For years the farmers of the great central west struggled early and late, summer and winter, to make ends meet, with no sympathy from organized capital or organized labor. Compelled to sell his products on a free-trade market and buy what he had to have on a protected market, so that labor and capital might be protected; paying high interest rates and selling his products in competition with the world, while the industrial interests were obtaining cheap money and selling their products on a protected market, he labored on unceasingly, hoping for better things in the future. And now, when he is coming into his own and enjoying a reasonable degree of prosperity along with capital and labor, he is told to stand and deliver.

What are we going to do about it? Are we going to stand idly by and allow organized labor to rob us of our legitimate profits, when they are adding to the high cost of living by demanding and receiving better wages? Is there any justice in robbing the farmer for the benefit of the producer?

If the consuming public will economize and make the same sacrifice that the farmer of the central west made when they were selling their products for less than the cost of production, the problems of the high cost of living will be settled in less than three months.

It seems to be all right for organized labor to add to the high cost of living by working shorter hours and receiving larger wages, but the farmer is supposed to be doing all he can to reduce the cost of living by working longer hours and raising larger crops. Without doubt the time is not far off when eight hours will be considered a day's work for nearly all wage earners, and business will be adjusted on that basis. But until that time comes neither organized labor nor organized capital should be allowed to coerce the government into enactment of any law that will shift the burdens to the producer.

ADDRESS BY JAMES R. HOWARD

President American Farm Bureau Federation

Gentlemen of the Federation:

I remember very well the first farm bureau work I ever did outside my own county. I'll not say whether it was in this state or not, but the occasion was a farmers' institute and the governor of the state was scheduled to speak to the farmers. The governor was a popular man in that community and a great audience had turned out to hear him. The chairman of the meeting, a good old German, opened the meeting something like this: "Mine frients," he said, "I am very sorry to tell you tonight that our good governor can't be wit' us. He vas called out of the state on important business, but I am very glad to announce that we have as a substitute for de governor four reels of moving pictures."

That was a good while ago, and since then the farm bureau movement has made a very rapid growth. While in New York last December I had the pleasure of going into Broome county, where the first county farm bureau in the United States was established. There I learned for the first time and at first hand where we got the terms, "farm bureau" and "county agent."

In the city of Binghamton in that county they had a strong commercial club. The work of this club was divided and carried on by bureaus. There was a bureau for this enterprise and a bureau for that and the other enterprise. Finally it occured to someone that they had never done anything for agriculture.

So they invited in a few farmers and discussed the possiblities of a farmers' aid thru an efficient, scientific helper. In the end they organized another department, or bureau, of the commercial club and called it a farm bureau. Then they employed a man to take charge of the department, to go out among the farmers and to carry on the work of the new bureau and he was called a county agent. So we have the terms, farm bureau and county agent.

From Broome county it spread to other counties, and then to other states, until at the present time we find farm bureaus and county agents in every state in the Union. In some few states these organizations are called "county councils of agriculture," but their operation and functions are exactly the same.

While the growth in other states has not been so rapid as it has in Iowa, the farm bureau has, on the whole thruout the country, made astonishing progress. They told me last winter in New York that they could not hope to accomplish anything in that state if the membership fee was more than $1 a year. I told them of our plan, that we are paying $5, and that Illinois is paying $10, but they said: "If we attempt to raise the membership dues above a dollar in New York the whole thing will go to pieces." Now they are putting on a new campaign for members with the fee ranging from $2 to $10, according to counties, and they are getting almost twice as many members as they had last year when the fee was only $1." And the same thing is true in nearly all the New England states.

At Chicago in November there was a feeling on the part of some that membership in the state organizations should be almost like salvation—it should be free. And some of them talked even of a 10 cent fee, but the states that were so very conservative at that time have become wide awake on the proposition and are putting on active membership campaigns.

The movement is spreading rapidly in the South. Georgia held a state meeting only the day before yesterday, called for the purpose of perfecting the state organization and ratifying the constitution of the American Federation. Kentucky has a farm bureau. Tennessee has organized a number of counties. A strong movement is on in South Carolina. Oklahoma is lined up and Texas is coming on rapidly. In the North practically every state, with the exceptions of Wisconsin and North Dakota, is well organized. And we are getting an average of a letter a day from Wisconsin asking us about the work.

Now, why are we having this wonderful growth of these farm organizations? There are three reasons: One is that the farmers realize their helplessness as individuals when it comes to solving their problems of production, marketing, etc. They have learned that great things can be accomplished by co-operation.

In connection with production it is an established fact that production of farm crops cannot be maintained unless stimulated by some different and unlooked for movement or influences. It is useless for me to take the time to tell you what they are. They go into the problems of labor upon the farm; the ever-advancing wage of city workers; the ever-shortening hours of labor; the lure of commercialism and of the white lights of the cities.

They deal also with the occupation of the land. With practically all of the tillable land fit for agricultural purposes under production, there are no more vast, uncultivated areas, barring the million or so acres that could be made to produce only at a great price. About a million acres can be reclaimed at a cost of $300 an acre for drainage.

This problem of production is a very serious one to the country. It is more serious to the man in the city than to the farmer, but in the final analysis it is serious to the farmers. We must recognize our dependence upon the other fellow in commercial lines. If we produced only what is needed for ourselves and our families, the problem would be simple. But the problem of our surplus is a problem that is always with us. It is the surplus produced upon the farms that loads railroad trains. It is the surplus that turns the wheels of the factories and creates labor for the millions of working men in the various industries of the country. It is the surplus which goes upon the shelves of our stores, and which we, as farmers, buy back at a price greatly in excess of what we got when it left our farms.

Now, that surplus is absolutely necessary for the welfare of this country. If we allow it to decrease by voluntary reduced production—I mean that beyond the legitimate needs of the country—we can have a lessened production and it perhaps would not hurt any more than an over-production; but what I mean is, if production of crops is below the normal demand the reaction will come back upon us, because there will not be the labor employed, the trains will cease to operate—or a part of them—business will become stagnant, prices will go down and it will react, soon or later, upon the farmer. So the problem of maintaining adequate production is not only a problem vitally important to the city man, but is a problem which concerns the farmer in the final analysis.

Another thing which led to this organization movement is the market situation. It has been demonstrated in a number of states that farmers' co-operative enterprises are a very great help in the solution of the marketing problem. You know that is true for we have co-operative creameries, co-operative elevators, co-operative livestock shipping associations in our own state, while some states have gone even farther in co-operative marketing than has Iowa.

Referring again to New York, where the problems are principally problems connected with dairying, let me tell you how deep I got into it. I was in five or six counties where there was practically no other interest of importance save dairying. I told them that Iowa was not a dairy state, and that I did not know very much about the dairy business. I suggested that I might talk about corn and hogs and beef, but when it came to milk products I could only refer to it in general terms.

When I got home I was looking up the production of various commodities in the different states and found, to my great surprise, that great as was the State of New York, second in the United States in dairy matters, that every time the New York farmers got a check for $15 for dairy products Iowa got a check for 14! Yet it is only a side line here.

I was also surprised in looking up the citrus fruit business in the western states to discover that the old hen in the poultry yards of Iowa produces more wealth every year than all the orange and lemon groves of California. Then I understood why it was that some New York banker figured out last year that if the farm property in Iowa were to be sold and the price invested in other farm property, that we could begin up in the New England states and take a circle down the southeastern coast, across the Gulf of Mexico and up into the mountain states, that we could buy out nineteen states entirely and then have money enough left to take our families to California to spend the winter, buy automobiles and a number of other things.

I am not going to take time tonight to discuss specifically the various problems. You know about the stockyards, the packers all those other questions which are vital. I will say that the American Farm Bureau Federation and the Federations of the different states are preparing to give their very best attention to these complicated questions. But they are not to be solved in a day.

There is another reason for the growth of these farmers' organizations. We are living in an age of turmoil and discord, the maelstrom of war turning into a cataclism of woe in many places a condition almost unprecedented in America; a condition whereby capital, ever monopolistic, ever leaning to the oppressive, is opposed to an organized labor which is fast becoming very radical, very aggressive, very defiant, very domineering in its demands upon the general public; and there is no hope of capital and labor reaching a solution of their difficulties other than by a great civil strife of some sort, unless some outside agency can come in to serve as a balance wheel.

It is a matter of common belief, of common expression and of common faith in the minds of many people that the organized farmers can and must serve; that it is their patriotic duty to organize in such manner that they can preserve the balance and sanity of the nation in this time of need. It is to meet that demand and to fulfill that responsibility that we are organizing.

Now, in regard to radicalism in this country. How bad is it? Before leaving Iowa I was under the impression that it was not so very extensive in the United States. I knew there must be a little of it. I hadn't heard of anything of the kind in Iowa until recently, but a well-developed case of bolshevism was discovered the other day in my own county.

It is much more common in the larger cities. In the East I found it very common indeed. A large part of the industrial troubles in the East are based upon fear—fear struck into the hearts of the commercial interests and of the laboring man; fear of being blown out of existence by a bomb in the hands of a "red."

There isn't any question about there being a tremendously large danger from the "red" elements in the country. How are we going to handle it? It is up to our governors, our state legislatures and the national government to settle. And it should not be done in a pussy-footing manner. It must be put down by the stern hand of the law, adequate, well-enforced law.

This radical element that is in the United States should be arrested and deported. They shoud be put out of the country and be made to stay out. We must not allow any more of that brand to come in if we can avoid it, and we ought to be able to do that. For the foreigners who are within our borders we should have a course of Americanism. Teach them the principles of democracy and good government, school them in the English language and make good citizens of them instead of bolsheviks.

It can be done to a very large extent by that system. And if there is anything which we, not the foreign element, not the "red" element, but we, all of us, need in this country today it is a continuance of that spirit of patriotism which we had during the war. I fear we are allowing it to slacken up just a little. We ought not to do it. Patriotism ought to be just as vital a part of our existence today as it was when we were fighting the Huns. Patriotism should be taught in the public schools of the country and the American Flag should float over every public school in the land now just as it did two or three years ago.

Now, just a word or two about American agriculture. I wonder if there is any danger of America ever becoming a non-agricultural country? There is a disposition on the part of certain interests and elements to make it such. The idea is that we are to be the great commercial nation of the world. That is the feeling in some of the large cities of the East.

They say, "We care nothing about the soil of the Mississippi Valley; we care nothing about your agricultural program. There is Brazil, bigger than the whole United States, which produces more hogs than Nebraska and Illinois and Iowa combined. There is capital to build railroads and highways in Brazil. They can raise foodstuffs and ship to us. We can build ships cheaper than any other nation can, and in return we can sell them the products of our factories. When the soil of South America gets on a par with the soil of the Mississippi Valley and the New England states then, and not until then, will we have time to think about this question of agriculture, and that will be generations ahead."

I asked, "How are you going to handle that thing? The labor isn't there."

And they replied: "If it is not there it is ready to go there. There are the stricken hordes of Europe. They are ready to go into South America and they are going—the people of Spain and Italy, of France and Germany and Scandanavia. They are seeking a harbor somewhere and they are the people we are going to take into South America to build up an agriculture which is going to compete with the Mississippi Valley states."

Now, I don't take that view seriously. I am giving it to you as it was presented to me, but it is worthy of serious thought. It shows the attitude of many eastern people concerning the future of American agriculture.

Now, just a word about the attitude of some other institutions toward agriculture. First consider union labor. I take this ground: That as a farmer my best customer is the working man in town, the organized laborer who is well-paid, working full time on a useful job. If he is not well-paid then I do not have a good market for my products. Well employed labor is essential in the promotion and prosperity of agriculture. It must be protected.

There are other things to consider. There is collective bargaining, which affects us both. There is the opposition of capitalistic monopoly which affects the farmer as well as it does the laborer, and with all that in common we owe labor a certain degree of protection. The question is this: Can the government protect the laborer in his rights as an individual and as an organization? Is it possible to effect a system of compulsory arbitration that will do away with the principle of strikes?

A strike always means forced suffering. It means freezing; it means starvation; it means disorder. Can we in any way avoid that thing? If this government of ours, if this state and other states cannot protect the citizens within that state; if Congress and the President cannot afford adequate protection to all the people and all classes, then this nation—and that includes organized labor, and that means protection against capitalistic monopoly—if that protection cannot locally be given to all the people, then democracy is a failure.

And if it cannot be given and democracy is a failure it is up to the farmers of the country and organized labor of the country and the commercial organizations of the country to reassemble the government. But if that protection can be afforded, and I contend before you tonight that it can, then I see no reason whatever for any more strikes; and I would favor, along with compulsory arbitration, a law which would guard us against—no, not strikes, for in a way you cannot compel men to work, they have a right to quit when they want to. Let me put it this way: We can have protection against organized strikes. We can have organized anti-strike legislation which should be effective.

The matter of universal military training is up for consideration and it affects every one of us, more or less. Now, I want to say this: The army officers of the country are trying to put over the compulsory military training bill. The soldiers who served the country and are back in civil life, so far as I have talked with them, are absolutely against any military training bill.

How is it going to affect the farmer? Is it going to take your boy and my boy away from the farm for six months in the year for two years of his life at the age of nineteen or twenty years, when he is worth more on the farm than anywhere else, and when his labor is needed on the farm. It will tend to draw him away from the farm entirely, and a lot of them will go back into the army. Wasn't it proven in the late war that we had the best soldiers that ever went onto a battle field and trained them in about six months' time?

We do need, perhaps, to train officers. We do need to have ordnance. We do need to be prepared in many ways, as we were not before; but that preparation can be made without conscripting the boys who aren't yet voters and who are needed at home and who themselves need home protection.

The crying need of this country today is civic and civil morality. We have got to develop in our national life a civil responsibility, a moral responsibility. We have got to take those things up as public questions, and we have got to see to it that the men who occupy the seats of authority in state and nation are clean men morally.

ADDRESS BY HON. W. L. HARDING
GOVERNOR OF IOWA

Mr. Chairman and Gentlemen:

I am delighted to see so many of you gathered here from over the state in this business you are engaged in. You have heard the story of the man who was riding on the seat with the coachman who kept snapping his whip and killing flies. Finally they came to a hornet's nest, and the guest said, "Why don't you snap the hornets?"

"Nothing doing," replied the coachman, "they're organized."

There isn't any reason why the farmer shouldn't be on as high a plane, so far as organization is concerned, as the hornets. One hornet can't do very much harm; but one million of them can. One farmer alone can't do very much good; but two hundred thousand of them can. There isn't any question about that. The man who thinks he can stand alone in this day and age is making a mighty serious mistake.

I was interested in what your chairman, Mr. Howard, said. And, by the way, we ought to feel proud of him. Just think of it—the organized agricultural interests of the United States of America wanted a man to lead them—why, naturally they would go to Iowa. It is a great honor to the state. It is a great responsibility to Mr. Howard.

I was interested in what he was saying about universal military training. I was out to Camp Dodge. I had to go out there very often, because in the position I occupied it was necessary for me officially to reach out into the homes of Iowa and take the best flower you had—your boy—to put the uniform on him. I was out there one day after a group of these lads had been gathered from the factories and the farms. They had been there about three weeks. I was talking to a "West Pointah" who had a peculiar little twist and turn to his speech that I could hardly understand —a highly educated man—and he said:

"Don't y'u know, suh, it's just impossible fo' me to tell these boys in Iowa anything about diggin' a ditch. I've been going to an officah's training school for three months to learn this trench warfare, and these boys know already how to dig a ditch."

Do you know that the fighting that won in this last war was the open fighting of the Americans? And that fighting was done in the upstairs part of the American soldier's anatomy.

This is my idea of what we ought to do in this U. S. A. in the line of preparedness. I think that our boys, and our girls, too, ought to be kept abreast of the times with the new methods that are being promulgated throughout the world for the purpose of destruction of one nation against the other, but it is not necessary to line the average American citizen up and count, one, two, three, four and then say, "Forward march!" and spend very much time telling him that he has to step out with the right foot first.

You tell that to an American boy once and he knows it forever after. You don't have to bring him into meeting once a week and tell him that when he starts out to march he is to put the right foot forward. It is not necessary. This matter of military preparedness is largely one of the head and heart and not of the legs. You can train the legs in a short time, and the head and heart can be prepared in a "short course."

Now, suppose some fellow—it would be just like some farmers did when they started the short course; they said, "Do they expect to bring these lads out from these schools and tell us something about farming?" Well, they did! And some of these military authorities will say, "Think of that idea! A short course in military preparation!"

Well, you had it. The gentleman over here told the truth, for many an Iowa lad left the farm home and within thirty or forty days from the time they left that home they were in the trenches in France. Maybe that was too short a time. I am not here to discuss that phase of the matter, but I am here to say that not one of those lads ever turned back or made a failure of the job over there.

But I am wandering away from the subject that I was to speak on. Before I touch that I want to say a word in reference to the farm bureau organization in the state. It is familiar to all of you. I think the first farm bureau was organized in the state in September, 1912. At the beginning of the war there were 26 counties organized. At the close of the war, and before that time, every county in the state was organized.

I can say to you men who have been active in the organization of these bureaus, that there was no other organization in the state that did more in an actual, substantial way than the farm bureaus did to put across the final victory. The farmers of Iowa through these organizations and through co-operation increased the production of swine—I can't call them pigs or hogs any more, they are too fine for any such name as that—increased the production about a million in the state on the call of the governor, and the increase in small grain over the previous ten years was 27 per cent. That's what you did. There were about fifty thousand boys taken away from the farms and put into the army, and yet with that reduction in labor, you made that increase in production. I think you have the right to swell out your chest a little if you want to.

I was asked to say a few words about the marketing question. The prosperity of any country is gauged by the prosperity of the farmer; and if there are those in the commercial centers who think it is not vital to keep up the farming in this country they will find that when the farm is gone their business is gone. The farm, being the source of original production, is therefore of vital interest to every citizen, no matter what his occupation may be. It matters not whether I live on and get my living from a farm, or whether I get it some place else, it is vital in the industrial life of the country, and it is vital to every citizen.

In the past agricultural policies have dealt largely with the subject of increased production. Tomorrow the agricultural policy of the state and nation should deal, not only with production, but should include the larger field of marketing. It is a double-barreled proposition. You want the production—the world needs it—but after you have produced it then comes the vital question of getting it to the proper market.

I can think of no other line of business activity where there is so much chance as in that of farming. You know there are a lot of folks who don't know anything about farming who think it is a dead mortal cinch. Why, there is a lot of chance mixed up in the farming game. The farmer must contend with the elements, which are always uncertain, in a greater degree than any other line of industry. I may safely say there is more gamble in farming than any other occupation. Hail storms, frost, hot winds, too much rain or lack of rain, and all that hard work goes glimmering.

It is not necessary, before this body, to review what is being done through agricultural colleges and other agencies to increase the fertility of the soil, improve machinery, and increase production. I hold that the farmer is entitled to sell what he produces on an honest market. At the present time this privilege is not granted. As a general proposition he takes the products of his farm to the nearest market place and sells it for the price that is offered him on the day he presents it, without any knowledge or information of an adequate nature as to whether or not he receives what the article is actually worth at the time. Every individual in the state, whether or not he is engaged in farming, is interested in the market problem. The laborer who buys and consumes the product of the farm is as vitally interested as is the farmer.

There are two general nation-wide obstacles in the way of an honest market at the present time that I desire to call your attention to. First is the food produce gambler, the man who buys and sells that which does not exist. I know when I mention this subject that I am treading on dangerous ground, not among farmers but other classes. There was a bill introduced last winter in the legislature that didn't get anywhere, but in it they were trying to regulate the bucket shop—any shop that has that kind of a name ought to be regulated.

You know last summer we had two or three southwest winds that were a little hot, and the price of corn went up. Then one morning we had a dew and the price went down. There wasn't a bushel more or less of corn in the United States, but millions of dollars were made, not by the men who produced it, but by the men who befuddled it.

I want it distinctly understood that in my judgment there never can be an honest market for the produce of the farm so long as the gambler is permitted to run loose and create false markets and false impressions about supply and demand, and he ought to be eliminated. And I want to say to you that the intelligence of a body of men like you have assembled through this organization in the state of Iowa, pooling their intelligent thought on the subject, is bound to solve the problem and solve it nearly right, at least.

Most of the problems that are bothering us are bothering us because of one or two things: Either you don't understand my viewpoint or I don't understand yours. We need organization, study and discussion, and then the courage to say the thing that is right and go through with it. If the farmers of this country were organized purely and selfishly for the farmer, without taking into consideration the other people of the country, the organization would be a menace to the country. But if the farmers organize with patriotism and love of neighbor as the keynote, and for the purpose of having prosperity for themselves so that others may have it, they can accomplish wonders in this country.

Second, we owe it to the producer as well as to the consumer to gather definite information as to the various kinds of foodstuffs produced each year, not by estimates, but by actual figures. If we had a system of reports so that we would know, say, in June, the number of acres that were planted, and then in December or January the actual production, and carry that on over a few years, then the farmer would be able to say whether he should increase production of this line next year or not. In other words what we must do is to re-establish the law of supply and demand, and if we can do that we can very largely solve this problem.

The growth of commercialized farming has increased the distance from producer to consumer. I can remember when we depended very largely upon the local market for our eggs and our butter, but that has changed This calls for a type of marketing organization unknown in the past. In former days the farmer was familiar with the demands of his local market and planted accordingly. But now, with the extended market, it is beyond his power to know, so he is much in the dark as to what to plant and where to sell.

What I would like to see done in this country is to gather the information so that you would know, and when you have the information then you can act. That is what the fellow on the Chicago Board of Trade does. He has his reporters out and gets the information and gets it quick. He is always just one step ahead of you, and is organized too. He spends his money for that very thing and, as your president so well said, you must spend some to make some in your own business.

As the farm has been organized in the past for increased production, the farmer should now be organized for increased opportunities and facilities for marketing. Various attempts have been made along this line, but most of them have been wide of the mark. The average individual has a preconceived notion that a political organization of some kind or nature can accomplish the purpose. The bankers are organized, also the manufacturers and laborers. If you watch the bankers' organization you may get some pointers. In their organization you will see a democrat and a republican sitting right alongside of each other in their conferences, and they conduct business from a business standpoint, not a party standpoint. The success of the farm bureau in the county, the state, and in the nation will be in keeping away from party politics of any kind or character. Stick to your knitting if you expect to get the garment finished. You are in a position to accomplish wonders for yourselves and for your country.

Just one other word in closing: I am firm of the opinion that the establishment of this country was divinely guided. The Declaration of Independence and Constitution were inspired, for they were written by noble men. The keynote of our government is individuality, INDIVIDUALITY! We have a government here the like of which does not exist anywhere else in the world, and it differs from others in this—that the whole revolves around the individual. There are certain rights that are guaranteed to you as a citizen of this country that the majority cannot take away. The minority has some rights in this country that the majority cannot take away. Those are the rights which are guaranteed by the Constitution.

There are men abroad who do not believe in the individual; they don't believe in the church; they don't believe in the home; they don't believe in the family as you and I believe in it. They call themselves "direct actionists." They are organized to tear down, to destroy our form of government, to destroy the home, to destroy the church, and they are organized in this country two million strong.

The red-blooded, pure-minded American citizen who believes in this government has a job ahead of him. He must organize for order. The keynote of our form of government was the keynote of the Sermon on the Mount. I don't know how you feel about it, but I believe that the Saviour came into this world to save me—not to save men, not to save classes, but to save individuals. The Constitution of this country was written in the spirit and heart beat of the Sermon on the Mount, and it is up to you and me to fight for the things it guarantees.

Most of our battles can be fought in the field of thought, with education. The great free public school system which we have in this country has won more victories than have ever been won with the gun. But let's not put ourselves in a position where we will have to fight with but one instrument. Let's fight with the public school and education, and let's carry it into the highways, the byways, and the dark places. Let's go wherever we find ignorance, superstition and wrong notions, and then not drive them out. Let us say:

"There's the flag! it is red, white and blue; there isn't room for any other flag in this country. If you won't follow Old Glory, and if you want to follow the red flag, we will put you on your ship—as has been suggested—and we will start it on the sea; and if you can find any place to land with that flag, then you land there."

I appreciate the opportunity you have given me, and I want to congratulate you on this organization. I want to encourage you to stay by it. I know these two men here, your president and your secretary. I have campaigned for this organization with both of them, and I know their hearts beat true. I think you couldn't get either of them to run for political office, and that's the kind of men you want at the head of this institution.

ADDRESS BY T. A. HOUGAS

PRESIDENT OF THE IOWA FARMERS' UNION

Friends:

I am glad to meet with you here this morning, and I must say that I am surprised to see such a gathering of representative men from over the state. Surprised, not that we had this number, but that we could get them out here, to see so many, as I understand that practically every county in the state is represented.

Well, we are here this morning, friends, to tell you something about the Farmers' Union, and while we had not anticipated taking very much of your time, yet having met a number of men who have put questions to me that need explanation I will tell you just exactly what the Farmers' Union aims to be. It is an educational, co-operative union, as its name signifies, educational and co-operative. Keep those two thoughts in mind.

The Farmers' Union originated in Texas something like fifteen or seventeen years ago. Of course, its growth was slow at first, but finally it got started and took almost a mushroom growth through the South at that time. The probable cause for this was the stand it took on the cotton question. One state organization after another was added until some twenty-eight or thirty are in existence today, with the membership gone up into a good many hundred thousand. I cannot give you the exact number because when January 1 comes every membership is dead if it is not renewed.

In the educational line we carry on social work something after the plan that the Grange has worked out. We have no set, stereotyped form, leaving that to the ingenuity and individuality of the various localities, furnishing them material and urging them to work along these lines.

There is another phase of educational work, and that is teaching the proper forms of agriculture, improved forms. I must say, however, that so far as organization is concerned, we have almost turned our backs on this, for the reason, not that we do not consider it worth while or necessary, but because in this state, as in most states, the state colleges are handling it so well and so thoroughly that we have only found it necessary to co-operate with them to get the best results.

Then we have the co-operative side—co-operation in both buying and selling. The farmer up to this time has been a class man. The farming business is one of the most important, when you figure its magnitude, of any in the world today. He is the only class man who sells for what he can get and buys for what he has to pay. Isn't that a fact? We go to the market and take what we can get for our produce. We go there and pay whatever we are asked. Show me another business of the magnitude of the farmer's that doesn't have its cost-plus attached to it. The farmers have been doing business along that line too long. We have been asked too much and we have been paid too little. Secretary Wilson put out a statement at one time to the effect that for every dollar paid by the consumer for the average things consumed the producer received 44 cents, while the rest went to the middle men. The figures are worse than that now since the war came on. It will drop down to 36 or 38 cents.

There are too many middle men between the producer and the consumer, too many men that are making a fat financial harvest that aren't essential in the scheme of distribution. Our general system of distribution is far from perfect. In fact, certain phases of it are nothing short of imposition. There are too many men making money there who have no business there, that aren't necessary, and it is for this reason that the Farmers' Union aims to assist in collective buying.

We concentrate our forces, our buying power, and buy in large quantities. Today we have a state exchange in this city. We serve all the Farmers' Union men in Iowa who want to buy. Nebraska has an exchange at Omaha doing a big business, and practically every state that is organized maintains its state exchange or purchasing agency. We are also working along the line of selling produce. The buying is the easiest and most easily attended to. One can join the Union tonight and make a purchase tomorrow, but not quite so easy on the selling of produce.

That is a slower process. We come up against long-standing monopolistic tendencies, and we have a hard fight to make inroads into those corporations and exchanges. In the line of stock selling we are simply making a start. At Omaha, Sioux City, St. Joe, Kansas City and Denver the Farmers' Union has live stock commission companies doing business. It is co-operative in management. When you ship to them you pay exactly the same commission that you would pay to any other commission firm, but at the end of the year the expense of doing that business is figured and all that is received above the actual cost of doing the business is pro rated back to the individuals who paid it in.

Last year, the first year for the Omaha house, they returned to their customers 38 cents on every dollar that was paid in commissions. This, the second year, is not ended yet, and will not be for sixty days, but the manager told me recently that if the balance of the year proves as prosperous as it has been so far, that he would be able to return some 57 or 58 cents on every dollar of commission that he had received. That is co-operation in selling. You are getting your commission at cost.

This is the line we are working along. If you should go to Omaha and happen to mention the Farmers' Union Commission Company in the offices of some of those old-line companies, why, they would feel sorry for you. They would think what a horrible mistake somebody was making. But you can judge for yourself, gentlemen, from the facts as I have stated them.

The Farmers' Union Commission Company started in less than two years ago in Omaha. They couldn't get a room in the Exchange Building and had to establish offices in a building on the hill over on the east side of the viaduct. But now they have offices in the Exchange Building. When the extra large influx of cattle from the ranges started last fall to those old companies that had loaned money on those cattle the Farmers' Union Commission Company held third place as to the total number of carloads of stock shipped to Omaha.

Those old firms that had been doing business for a longer time than some of us can remember were outstripped, and only two of them were ahead on all classes of stock combined. On hog shipments it has held first place, handling more hogs than any other firm there. These things tell us that there must be quality of service there. They can say what they please, but the results tell finally. You can fool a man a time or two, but you cannot fool him all the time. The houses at Sioux City, St. Joe and Kansas City are all on a paying basis. The one in Denver was started last June and is now on a paying basis notwithstanding its youth.

In the matter of grain we had a fight. It was impossible for the Nebraska men to buy a seat on the Omaha exchange. They wouldn't sell to them from the fact that they wanted to pay back the trade benefits, but the Omaha men went into the legislaure and secured a law that compelled them to sell a seat on that grain exchange. This summer a corporation was formed to procure a seat and begin business, and as soon as that can be effected we will be in line on the grain end in Nebraska the same as anybody else. We will have the right to have samples spread upon the grain tables and receive fair treatment the same as any other grain firm.

Those are the things on the selling end that we have been able to accomplish so far. To be sure, we have not been able to get as far as we wanted to, but we are working along that line and that is our aim. We had a desperate struggle because the old firms died hard. They frowned on anything that savored of co-operation. They frown on anything that tends to break in on the old-established order. We find it so not only in the grain exchanges and the stock exchanges, but in the general trade conditions of the country today. We go with produce to the old manufacturer and some of them will scarcely treat us like gentlemen. Some do, others do not. They simply will not have their old lines of trade broken into, but mind you, friends, the day is not far distant when the big business is going to go straight from the factory to the consumer with just as little in between as possible.

Standard Oil is doing it today, and making a success of it. There are other firms doing it. Some of the old-line implement houses have turned over bodily their products to catalog houses to handle for them. Others can be had by Farmers' Union or any other group of farmers that will agree to take their output and turn it to the trade with a minimum of distribution expense. So we have the aim of the Farmers' Union exemplified by what we are trying to do.

There are a few things that are peculiar to our organization, and we believe that we see wisdom in them. In our requirements for membership, and especially in the matter of eligibility for office in the state Unions, we insist that they be absolute, bona fide farmers, believing that we can hope for little good to come to us permanently from anyone who is not at heart and largely a bona fide farmer. Now, there are some instances where we are having trouble along this line. We have men who say they are farmers, but who are not. They may own a little patch of land, or they may own a big tract, and not be farmers. Owning land doesn't make one a farmer. What we want is to exclude the man who may have interests antagonistic to the interests of the farmer.

We are working along lines of controlling and introducing legislation wherever it may be necessary or desirable. All of these things we do not make public at all times, for reasons that you know are wise. Very often you spill the beans by telling all your plans. But there is one question I want to speak of here. It has been mentioned before, and that is the question that is before the nation today—to strike or not to strike. I cannot say that I know the sentiment of all the members of the Farmers' Union, but I do know the opinions of a great many. And I know my own opinion. We are in sympathy with labor, but at the same time we cannot condone what seems to be nothing short of a crime because of sympathy.

We may have sympathy with the labor union man in his necessity, and we would go a long way to help him in his legitimate claims; but when that man will ignore the rights of independent individuals to the extent of causing physical discomfort and immense financial losses, we simply say that he is going too far. There must be some other way to settle these things. Hence, personally I have no hesitation in saying that we stand for an anti-strike, compulsory arbitration method of such wisdom as we may be able to devise in order to make forever impossible such a calamity as we have seen in the last few weeks.

As farmers we have suffered untold millions of loss just because two parties, with whom we have no influence and with whom we have nothing to do and in whose quarrel we have no interest, are scrapping. We stood the brunt. I am certain that the loss to the farming community and the consumer together would far exceed the combined loss of the operator and the miner. So I say we stand for compulsory arbitration and anti-strike legislation worked out in as fair and equitable way as human brains and disinterested men can work it out.

I have one criticism. Criticism, you know, may and should be, kind. We have among our Farm Union men, unfortunately, some who are not very favorable to the Farm Bureau movement. But I don't believe it is representative. It might be in some localities but it is exceptional. That is not altogether the fault of the Farm Union man, for I believe you will pardon me if I say there has in rare instances been a little provocation that caused it. There have been unwise acts, perhaps, on both sides. It would be strange indeed if we could get as many men working together as we did in the Farmers' Union and the Farm Bureau and not have a few radicals. But we must not condemn all for the acts of a few. It is not representative of the body itself.

Personally I have none of it. I have worked in a farm bureau as long as there has been a farm bureau in our county. I am there now and expect to stay there because I believe it is right. Whatever we do let's work together and not get apart. We have all to gain and nothing to lose. I cannot see where there need be any quarrel between us. I cannot see where there need be any lost motion between us.

There are other questions I would like to talk about. A number have asked me to express our attitude on the co-operation of the Farmers' Union. I believe I have done that. But I'll say this: I think you will find a majority of the Farmers' Union men ready to co-operate at any time. I think the majority will drop into your line of work. I think I know the sentiment of our state board. I believe I know the sentiment of our state officers, and I am sure you will meet with no difficulty there. All we ask is that we be given credit for being honest in the matter and trying to do the right. I believe in the course of time, if wisdom is used, that we can walk side by side, unite our interests and pull together where we have common interests.

ADDRESS BY C. F. CURTISS, PRESIDENT INTERNATIONAL LIVESTOCK EXPOSITION.

Gentlemen:

At the outset I wish to express my appreciation of the kind of organization you have here. The first time, I believe, in the history of agriculture in America that we have a real organization in a broad, effective way, and in a fair-minded, liberal way, such as to really express a stand for the agricultural interests of the United States. Its platform is broad enough for every farmer to stand upon squarely with both feet, and fair enough to function with every other industry, and that is the kind of an organization that we need.

Now, what of the future of agriculture and the livestock industry? As I approach the question I am reminded somewhat of the Negro porter who was asked by a passenger to change a twenty-dollar bill. "Boss," said the colored man, "if I could change $20 I wouldn't be here."

I am free to admit my inability to predict the future of business and agricultural conditions, but I think there are some things that stand out clearly. One of the first and foremost is that the price of agricultural products is bound to be depressed more than the cost of production; that the prices of agricultural products will come down sooner than the cost of production will come down. In fact, prices have already fallen somewhat, while the cost of production has gone up, and we are confronted with a year of high prices, so far as costs are concerned.

There are other conditions which are relatively clear. There is going to be a narrower margin of profit during the period of this readjustment than we have had in the past. That margin may be very small. It may disappear entirely on a good many products while we are going through this period of price readjustment. We had every reason to believe—and did believe—that when the war closed there would be a very large foreign demand for the agricultural products of this country, especially the meat products. When Mr. Hoover came back he gave out the word that the foreign nations must depend upon this country for the large majority of their meat products. Similar reports were made from other quarters, but some unexpected things happened.

In the first place, those countries were practically bankrupt. They had no producing power, they had no credit, and credit has not even yet been extended to them. Then another unexpected thing developed, the rate of foreign exchange on their money made it impracticable, impossible, for them to buy products under existing conditions. Then the foreign demand fell off almost entirely for our meat products. We haven't had the foreign market we anticipated, and with the increase in meat production in 1918 it left us with a surplus which necessarily sold at a lower price.

How long these conditions will continue, how long it will be before the foreign countries come back and purchase our products, we cannot tell, but I think it is reasonably clear that they aren't going to be very extensive purchasers until they are in a position to sell us something and thereby readjust the rate of exchange. When they get back upon their feet in an industrial way and have something to sell, to equalize the rate of exchange, they will undoubtedly come into the markets again for our agricultural products.

How seriously that may affect us we cannot tell. If the matter of our foreign relations were settled and credit extended to those people, I have an idea they would come back into production rather rapidly and their relations would be resumed. But there are other factors that will enter into the situation. There is going to be a higher grade of efficiency, not only in agriculture but in industrial manufacturing, in foreign countries as well as in our own, when we get back to normal conditions of business.

Lloyd George made the statement about a year before the war ended that there wasn't the same machinery in a single factory or industrial plant in Great Britain that had been there before the war. All of it had been replaced by higher-powered and better machinery. The same thing applies to all European countries today, except Russia. Those countries can come back, and we can depend upon having stronger competition than we ever met before from all of those countries in mercantile lines, excepting Russia, and no one knows when things will be settled there.

I think they will throw onto the market large quantities of mercantile products and manufactured products, and some of them may displace some of our own manufactured products. Then we have the great southern continent, South America, that is increasingly productive, and coming into agricultural competition in a way we have never seemed to realize. They have advantages in economy of production bound to tell when they compete on the markets with us.

On the plains of Argentina I saw the finest lambs you can imagine that would come into the markets of this and foreign countries where they could be marketed about Christmas time for the holiday trade in the best possible finish and the highest quality without any grain whatever. They had nothing except what they could pick from their extensive alfalfa pastures. We cannot compete in production with that kind of mutton for the holiday trade, or for the winter months where they have the open grazing with no expense except pasture. And practically all the meats of the Argentine, and that applies to Brazil as well, are produced in the open on the pastures where they have nothing but cheap land and cheap grass and the care of their stock to contribute to the expense.

They have not been able to put those products upon the markets of this country and foreign countries during the war by reason of lack of shipping facilities. These facilities are now being restored upon a better basis than they have ever been, and they are going to be able to market those products. They are going to come into competition with us on foreign markets and right here in our own markets. We have some very important economic trade conditions to work out, more so than any we have ever faced, and it is well indeed that an organization like this has come into existence at this time.

It has never been so badly needed as it is today. The farmers have something to say when it comes to questions of shipping, international trade, and other important policies, also when it comes to the development and protection of industries in this country. I am absolutely certain in my own mind that we are going to be confronted with a keener competition in agricultural products than we have ever yet had or realized, and it stands us well in hand to make a careful survey of the economic conditions of the country.

I congratulate you upon the success of this meeting and upon the strong organization you have formed in this state. I think you are developing into a national organization, and I wish you the greatest success and good results, as I believe will come from it.

PART VI

State Food and Dairy Commissioner's Report for Year 1919

W. B. BARNEY, Commissioner

Post war conditions have affected our national life almost as acutely as did those of war times. High prices, restlessness, speculation and disturbed economic conditions, in general, have been the after-math of every great war and it is not at all surprising that they should be experienced after the greatest of all wars. As a matter of fact, the reconstruction period, to date, has not seen crises as far reaching in their effects as might have been anticipated after such a titanic struggle, involving as it did, the entire world. This country renewed its normal life with surprisingly little friction and even now, one year from the time when the whole energies of the country were absorbed in the task of making war, evidences of the shadow which overhung the world, are rapidly disappearing. The country, as a whole, has mobilized itself for peace with the same energy and determination with which it mobilized for war. The task of absorbing an army of 5,000,000 men into our economic life and changing our industry to fit the suddenly changed conditions has been a tremendous one but one which patience and the will to do right has practically succeeded in accomplishing. The task is not finished, but the most critical period has passed.

This department, has from the very nature of its work, felt keenly the stress of the times and various situations, particularly that of increased ilving costs, have arisen which have demanded time and attention. Because of the critical situation brought about by the stress of high prices, it was necessary for the men in the field to devote a large amount of time to various situations which arose, and this at a time when routine inspection work was heaviest. Complaints of hoarding, discrimination and like illegalities were frequent and while many of these, on the face, appeared exaggerated, if not entirely without foundation, it was necessary to trace every complaint and report to the complainant before the incident could be considered closed. In connection with this work, hundreds of establishments were visited by the department inspectors for the purpose of obtaining information regarding the buying and selling costs of hundreds of commodities in order that some idea might be obtained as to the profits being made by merchants of the state.

An effort to equalize distribution was also made and the department was successful in putting producers and distributors in touch in a number of instances, with advantage to them not only, but to the consumer as well. I might say here that I believe that there is a big place for work of this kind and that the time has arrived when the establishment of a State Marketing Bureau would be decidedly advantageous. Even with our modern facilities for rapid transportation and the rapid dissemination of news, surprising inequalities of distribution exist, and shortages of certain commodities in one place and over abundance in others, were found to be frequent. Obviously, if some agency was created to eliminate this condition all would be benefited. Lacking such an agency, this department has attempted to exercise its functions to a certain extent and, all things considered, has been very successful. All of this work has entailed a huge amount of detailed investigation and the resources of the department have been frequently taxed.

FAIR PRICE COMMITTEE

In view of the large number of complaints being made and because of the fact that some merchants appear to be tempted by public extravagance to unduly increase their prices, I believe that the establishment of a Fair Price Committee would prove of invaluable assistance to the citizens of the state. Inasmuch as I have outlined this proposal at length in another part of the report, under the living cost investigation, I will not take it up further at this time.

The work of the department, particularly the work of the laboratory, was badly disorganized for nearly a month early last fall because of the necessity for changing our quarters. Our former quarters were torn down in accordance with the capitol extension plan, and our offices moved to their present location, on the third floor of the old Bryant school house. While the present quarters will do as a make-shift, we are badly crowded, and it is to be hoped that we will not be forced to remain longer than absolutely necessary.

The routine work of the department has greatly increased during the past year, particularly the work of scale inspection, and it appears that the number of men engaged in this work should be increased.

Of invaluable assistance were a number of important changes in the laws enforced by this department, enacted by the Thirty-eighth General Assembly. Changes were made in the food law, sanitary law, dairy law and weights and measures law. One new law, the egg law, was given to this department to enforce. These changes will be discussed elsewhere.

The same General Assembly also provided for a revision of the salaries of the employes of this department, and I am frank to say that I believe that none of the numerous changes in the laws enforced by this department were of more benefit. There had been no increases granted for a number of years. The cost of living had advanced 65 to 75 per cent. Commercial and other concerns had given their help increases somewhere near in proportion to the increased cost of living. The department lost eleven men during 1918 on account of these conditions. The plan I offered putting inspectors on a graduated basis increasing their salaries $100.00 per year, after they became familiar with the work, reaching a maximum after five years' service, was adopted by the legislature, as presented, except that they made the maximum four years. I am pleased to say that it is working out in a most satisfactory way and has helped to eliminate, to a great extent, the putting in service of inexperienced men every few months.

Another effort will be made this winter to stimulate the interest of farmers in the southern part of Iowa in dairying. The high prices which dairy products have been bringing during the past year will prove a big talking point to farmers who have been subjected to wide fluctuations in the prices of other farm produce. Then, too, the value of the dairy cow as the yielder of a cash crop is becoming more appreciated. Interest in thoroughbred dairy cattle is also increasing. This is a very hopeful sign, indeed. .

If, as brought out elsewhere in this report, the production in southern Iowa can be brought up to the same basis as that of northern Iowa, the value to the state will be enormous. During the past year conservative figures show that an income of $143,064,933.17 was returned to the state of Iowa from its dairy products alone, and since practically all of our dairying is done in the northern part of the state, it is safe to say that when southern Iowa does as much as northern Iowa, this income will be at least doubled.

One of the principal causes of uneasiness prior to the demobilization of the army was the fear that the farm boys who had entered the service, particularly those who had served abroad, would not be satisfied to return to the farm after their discharge from the army. The general sentiment expressive of this uneasiness might be considered to have been summed up in the words of the popular song, "How are you going to keep them down on the farm after they have seen Paree?" That these fears were groundless is proved by the eagerness with which the boys returned to their pre-war tasks. If accurate data could be secured, it would probably be shown that a comparatively small percentage of the boys who entered the army from the farms have not returned. Not only is this true, but I even believe that the normal drift from the farm to the city has been largely checked. Better home conditions, modern machinery and the automobile are, in my opinion, largely responsible for the willingness of the young man and young woman to remain at home. Probably no single factor has been more important in making the farm boy contented than has the automobile. It has brought the advantages of the city to his door and enabled him to escape its disadvantages. It has broadened his viewpoint and made him more appreciative of the better things of life.

The stimulation of interest in the good roads movement means that it will not be many years before the city's advantages will be accessible even to the remotest farm home. Leaving aside the value of good roads to the farmer in marketing his crop, the importance of keeping the farm boys and girls contented, cannot be over-estimated.

THE SUPPRESSION OF TUBERCULOSIS

In my opinion there was no act of the 38th General Assembly of more importance to the people of our great Commonwealth than the law controlling and suppressing diseases of domestic animals. In the cattle industry, Iowa admittedly, taking all things into consideration, surpasses all other states because of the number of pure bred herds within her borders. Besides this, she stands almost alone in the production of hogs.

This measure is sure to have a great influence on the production of both cattle and hogs in the future, as it will be reasonably easy to eradicate tuberculosis in our swine when our bovine kind are free of this dread disease.

Neighboring states have enacted similar laws and profited by their foresight. I have always felt that, since the public would be benefited, it was right and reasonable that they should, in a measure, share any loss that would come to the owner of the herd. This is especially true as it applies to breeding and dairy cattle, as it is reasonable to assume that the law as it was drafted contemplated caring for this class of cattle and bringing them within its scope, and it is perfectly right that it should.

I have never thought that the dairyman or breeder should be compensated in full for reactors as that would perhaps encourage carelessness and in some instances trickery and dishonest methods.

While the state and federal indemnity is a great inducement to the cattle man to clean up, when you take the present value of cattle into consideration, it is not as large as it should be. This is especially true as it applies to the better class of registered or pure bred cattle.

After an experience of over 35 years in breeding cattle, I can draw but one conclusion; that a great share of our troubles with this disease would be eliminated by the use of clean, well lighted and well ventilated barns. I do not wish to be understood as saying that the disease can be eliminated under conditions of this kind without the use of the tuberculin test and doing away with the reactors. I do feel sure, however, that the percentage of loss on the first federal and state test and tests thereafter will be much less under such conditions. It is surprising to me, that in this day and age, there are still many breeders who do not recognize the value of light and ventilation. The old filthy plank floor, poorly lighted, ill-ventilated barn, is the harbinger of disease, especially tuberculosis. There is nothing cheaper and better than sunlight. It is my opinion that the Almighty would not have supplied it in such generous quantities, had He known that the stockman and farmer had so small an appreciation of its value.

It is my judgment that it will be a difficult matter within a few years for the owner of a herd of pure bred, registered cattle to do any considerable amount of business, unless the herd is under federal supervision or in the accredited list. I feel sure that cow's milk has saved a thousand children, where one has been made to suffer by its use. The bare possibility of one child in a thousand becoming affected by its use, is a good and sufficient reason why our dairy herds should be cleaned up.

The breeder who ignores right methods and up-to-date practices is like the child playing with fire—you can't tell when either will be burned. We have had too many examples of this kind within the last year. I call to mind a breeder who was about to hold a sale. The date was fixed, and quite an amount had been spent for advertising. Just to put on the finishing touch, he called in a veterinarian and applied the test. About sixty per cent of the lot reacted. No one wanted the balance, so the sale had to be declared off. Had a test been made a few years earlier the probabilities are a few reactors would have been found and if they had been taken out and a follow up test made, the percentage of loss at time of sale would have been so small as to be of no consequence.

The tuberculin test measure may really be considered as an insurance. It helps care for a part of the loss that is sustained by the breeder or owner who is unfortunate enough to get his herd infected. It encourages the young breeder to go into the industry. It says to him, "If you will do so, the state and Government jointly will stand between you and a total loss if your herd becomes infected." The older breeder who does not take advantage of the law has a rather narrow vision and in my way of thinking, will find the business unsatisfactory and not at all profitable.

Though we are a little late in taking hold of a good thing, let us show our neighbors in Minnesota and Wisconsin that we are none the less in earnest than they have been, and we will soon have in Iowa a long list of accredited herds.

DAIRY PRODUCTS

As stated elsewhere, a conservative estimate of the income received by the State from its dairy products, places the figure at $143,064,933.17, derived from the following sources:

Creamery Butter	$43,969,285.47
Ice Cream	6,600,000.00
Market Milk	27,700,000.00
Cheese	330,000.00
Farm Dairy Butter	18,000,000.00
Condensed Milk	965,647.70
Skim and Butter Milk	15,500,000.00
Fertilizer	30,000,000.00

If the campaign in southern Iowa is productive of results, a rapid increase in this total may be expected within the next few years.

In every instance except one, the figures given above show an increase over last year—the exception being farm dairy butter. I regard the decrease of revenue from this source as being a hopeful sign rather than something to be regreted. I believe that the time has come when it is far more profitable for the farmer to sell his cream to the creamery than to manufacture it into butter himself. For this reason I am pleased, rather than disappointed, to note that the tendency is to sell the cream and purchase butter from the creamery.

In this connection, I note with regret the increased use of oleomargarine among the farmers in the state. It is not my purpose at this time to give a long discussion of the merits or demerits of oleomargarine, but I do feel that the production of butter is of far more value to the state than is the manufacture of oleomargarine and I have little patience with the farmer who sells his birthright for a mess of pottage by selling his cream to the creamery and then using part of his cream check to buy oleomargarine for his own use.

One dangerous practice which we are making every effort to eliminate is the custom of a number of dairy farmers to castrate pure bred sires. Considering the prices being paid for pure bred stock, it would seem almost impossible that a practice of this kind could be indulged in, but it is unfortunately true. However, by taking prompt measures, we believe that this evil will be very shortly corrected. Paradoxical as it may seem, we have a situation wherein some farmers are castrating pure bred bulls while others are begging to be supplied with them. The numerous educational campaigns and frequent experiments designed to prove the value of a pure bred sire at the head of the herd, are having an effect, and the demand for sires of this kind of every dairy breed has been greatly stimulated. An effort is being made to interest the various dairy breed organizations in a movement to replace grade sires, particularly those of the scrub variety, with good, pure bred stock. While it is too early to make any predictions as to the success of this plan, a large number of the more prominent breeders have displayed considerable interest in it, and I feel confident that a good working plan to bring this movement about will be formulated very soon.

Probably never before in our history has the export situation played as prominent a part in the prices of our dairy products as during the last few years. While rapid recuperation on the part of European dairy countries is looked for, the export situation has not as yet been greatly affected, and dairy products continue to clear our ports in large quantities. I would take this occasion, however, to warn the dairy manufacturers of this state against being lulled into a sense of security by the belief that present prices will continue. Despite the fact that many European dairy countries are in crying need of cattle, it is my solemn belief that foreign competition will again be met within a very short time not only on our export but on our home markets. Only by producing dairy products of a high grade can we hope to be able to compete with foreign made goods, when that time comes.

While dwelling upon this subject, I wish again to call the attention of the manufacturers of our dairy products, particularly manufacturers of creamery butter, to the fact that too little attention is being paid to our local Iowa markets. Particularly is this true of our smaller creameries. The incongruous situation of seeing butter shipped from a creamery located in one town to be sold in another, and from a creamery located in the second town to be sold in the first, is frequently encountered. Frequent conjectures as to the effect of prohibition on the sale of dairy products are heard. While no exact figures are available, reports reaching this office tend to show that the sale of dairy products, especially of ice cream and buttermilk, has been greatly stimulated by the prohibition of alcoholic drinks.

At the present time I know of no recommendation which I could make which would be of greater importance, than that a separate dairy building be erected upon the State Fair grounds. As stated, dairying is a $140,000,000 industry in the state of Iowa. The casual visitor at the State Fair would receive the impression that it did not aggregate that many thousands. Where many industries of far less importance to the state are given ample space, the dairy industry is represented by two 10 by 12 booths and an ice cream stand. The dairy industry of Iowa should have a separate building which should be second to none in the country. Provisions should be made for the manufacture and sale of dairy products upon the grounds, in view of any one who cared to watch. I feel no hesitation in saying that if these facts were brought to the attention of our legislators, no difficulty would be experienced in obtaining the representation which is due the industry.

Probably the most promising dairy movement which has taken place in the state for a long time has been the organization of the Iowa Dairy Council. This organization is designed to further the interest of the dairy industry, and while hard work was necessary to give it a proper start, its success now seems assured. The Council is certain to fill a long felt want and will prove of invaluable aid to the dairymen of the state.

CREAMERY BUTTER

Despite the fact that the number of creameries in the state has decreased from 421 to 393 active plants during the past year, the amount of creamery butter manufactured totaled 90,915,938 pounds, as compared to 83,349,309 pounds for 1918. Owing to this increase and to the high prices prevailing, the net returns to the creameries reporting this year was $43,969,285.47 as compared to $38,806,989 for last year—a gain of more than $5,000,000. Perhaps it would be more correct to add a third reason for this increase, i. e., the improvement in quality of the butter going on the markets of the country from this state. Due to several improvement campaigns carried on by this Department acting in co-operation with the Iowa State Dairy Association and the Iowa State College the quality of Iowa's creamery butter is gradually improving and before many years will have elapsed it is my hope that a large percentage of the butter leaving this state will go on the markets grading very nearly creamery extras.

While the various improvement campaigns waged have all had their part in bringing about improvements, the campaign to bring about the installation of cream cooling tanks on the dairy farm was perhaps the most important. According to the creamery reports, the butter-maker, manager, or some other official of 141 Iowa Creameries have been working with their patrons during the past year, to have these cooling tanks installed. Of the 141 reporting, but 40 reported the number of tanks installed, and the reports of these 40 showed that 853 tanks had been purchased and were being used by patrons. That these numbers are very conservative is shown by the fact that the report of Mr. Frank L. Odell, who, with Mr. A. W. Rudnick, has been instrumental in the success of this movement, showed that last year approximately 200 creameries had been interested in the movement and that 1200 cream cooling tanks had been installed and 100 milk houses built. It is very probable, indeed, that the report of Mr. Odell and Mr. Rudnick will show a very great increase for the present year. While the greatest credit for this work is due, of course, to Mr. Odell and Mr. Rudnick for their untiring efforts, the generous interest of the Iowa Buttermakers Association and a number of commercial firms aided greatly in the success of the movement, because of the interest which they added to it by their offer of cash prizes which greatly stimulated interest in the contest.

Perhaps an example of what this movement is doing for the creamery will be of interest. According to the report of one Iowa creamery less than 10 per cent of the cream received from patrons was sweet prior to the installation of the tanks. The following year, 1918, 100 cream cooling tanks were installed and the amount of sweet cream received was increased to 40 per cent. This year the number of tanks installed was greatly increased and the amount of sweet cream received was likewise increased. By the end of another year this creamery hopes to have a tank on every patron's farm and firmly anticipates that when this is brought about the amount of sweet cream received will be very nearly one hundred per cent. During the present year this creamery has been receiving 3 cents per pound more for the butter manufactured from sweet cream than that made from sour cream, and by next year expects to receive a 5 cent premium on all the butter which it manufactures.

In this connection it might be well to briefly state here a few of the possibilities wherein the income received by the state through its creameries can be greatly increased. The average price of extra creamery butter for the first nine months of the present year (New York Market) was 57.49 cents. As stated, the income from the 90,915,938 pounds of butter sold by the creameries of the state for the past year was $43,969,285.47. This means, of course, that the butter manufactured by Iowa creameries did not go on the market scoring an average of extra. Had it done so, the return would have been nearly $52,300,000, the actual loss through failure to obtain this grade being slightly less than $8,300,000, if the figures given are used as a basis. Obviously, then, any movement which will tend to improve the quality of the butter going from the creameries of this state, will mean a huge increase in the amount of money coming into Iowa for its creamery butter.

There are other sources of losses which may also be well mentioned. While the majority of butter-makers of Iowa have demonstrated their capability for the work which they are doing, a few others have proved their unfitness by their carelessness and inefficiency. From a survey conducted by this department I find that failure to obtain a fair amount of over-run has cost the creameries of Iowa more than $150,000 for the year included in this report. Excessive manufacturing costs have been the cause of additional losses. In most cases where losses are being sustained, lack of knowledge or unfitness on the part of the butter-maker is apparently responsible; as a matter of fact, the underlying cause lies at the door of the creamery patron himself. He has attempted to secure the services of a man as cheaply as possible and ordinarily he is successful in his aim—he gets a "cheap" man.

This department has been attempting to demonstrate to the creamery management that "A good servant is worthy of his hire," and that low wages are not always an indication of economic management. It is not alone in their failure to secure a good butter-maker that the creamery management is guilty of unbusiness-like methods. In several instances we have found butter-makers, whom we have known from past experience to be capable, obtaining low over-runs and manufacturing butter at excessive cost. Investigation showed that the losses sustained were due, not to the inability of the butter-maker, but to the poor equipment of the creamery. In practically every case of this kind the butter-maker had repeatedly urged the owners to install new apparatus but without success. In general the owners of these creameries have been more inclined to listen to inspectors of this department than they have been to their butter-makers and I believe that most of the conditions mentioned can be remedied during the coming year.

There have been numerous instances of the cases cited and others of a like nature, and the men of our dairy inspection staff have been called upon to attend hundreds of evening meetings of creamery boards. I am pleased to state that the inspectors have always shown a keen interest in this work and have devoted many hours to it outside of the time taken up by their regular daily work, without complaint.

In view of the interest attached to high living costs during the past year or two, it may be interesting to note the average price of creamery butter during the past few years as compared with the price of the first nine months of the present year. The prices quoted here are for creamery extras on the New York market.

1919	57.49
1918	51.58
1917	42.89
1909	28.48

Despite the increase of one hundred per cent in the cost of butter, a comparison of it and other food stuffs will show that food value considered, the price is by no means exorbitant.

Further, as the following table will show, the increased price of butter is justified by the increase in feed prices.

	December, 1914	December, 1919
Bran, per ton	$24.90	$45.50
Cottonseed meal, per ton	31.30	80.80
Corn, per bu.	.50	1.20
Oats, per bu.	.41	.64
Hay, per ton	10.10	17.40
Labor, without board	40.50	72.00
Labor, with board	30.10	55.65

Owing to the necessity of supplying sweet butter for the use of the Navy last year but little was done toward bringing about a wider use of the State Brand in the manufacture of creamery butter. This year, however, increased activity has been displayed and as a result several more creameries are expected to qualify for the use of the Brand this winter. A noticeable increase in the demand for this butter by buyers on the New York market has been manifested during the past three months and the price premiums offered to the creameries manufacturing it have been very liberal. This increased demand is certain to have its effects among the butter plants and should serve as an impetus to the movement.

Even though the use of the brand should not become general in this state its value cannot be over-estimated. It will not only serve to bring added prestige and high financial returns to the creameries actually using it, but bring about a keener inquiry into the merits of Iowa butter as a whole. The task involved in inducing the creameries to take up the State Brand is by no means a small one. The exacting provisions of the regulations governing its use, necessitates the use of the best quality of raw material and creamery apparatus and the employment of skilled men, and it is sometimes difficult, therefore, to convince creamery patrons to undertake the added expense which is frequently involved unless they can be assured a good return for this financial investment. Fortunately, the buyers on the market now appear willing to pay for this additional cost, and our task should not be so difficult in the future, but it is mainly to the creameries who first commenced to use this brand that the credit of this situation is due. Their courageous refusal to discontinue the use of the brand when its use apparently meant nothing in the way of financial reward, kept the project from being an ignominious failure and, if as is to be hoped, the trade mark ever becomes one of Iowa's big assets, it will be due in no small measure to their firm stand in continuing to recognize its value.

It has been briefly stated that there are many poorly paid butter-makers in the state, a fact to which is largely attributed the heavy losses sustained by a number of creameries. As a matter of fact, the wages paid these men is in general far too little considering the class of work they are called upon to do. For example the average monthly salary of Iowa butter-makers is a few cents less than $130. When it is considered that this includes a number of high salaried men, it is not difficult to conclude that there are far too many men receiving less than this sum, a fact which is certainly not conducive to the expenditure of any unnecessary time or labor in the interest of the creamery. When the enormous increases in living costs are considered, it will be seen that many of them are hard put to eke out a mere existence.

An examination of the reports sent in by the creameries shows very plainly that great opportunities are being overlooked and that the responsibility for failure to take advantage of them lies about equally on the butter-maker and his employers. A well paid butter-maker will usually save the creamery his salary several times over while, as stated, a "cheap" butter-maker is usually cheap at any price. A point which may be of interest in this connection was well brought out in the reports compiled from the creameries. In practically every instance where the butter-maker was assisting in the formation of calf clubs, cow test associations, pure bred sire movements and the installation of cream cooling tanks upon patron's farms, it was discovered that he was receiving a salary considerably higher than the average.

That the work of the various organizations having to do with the betterment of dairy conditions in the state is beginning to bring results is shown by the fact that not only is the average production of the dairy cows in Iowa being increased but that the average number of cows per creamery patron has also increased.

In past reports I have repeatedly stated my belief that southern Iowa offered a great field for dairying. I still hold to this belief. This year we are planning to continue work in this part of the state with increased activity and, with the assistance of the Iowa State Dairy Association, will hold a number of meetings and demonstrations in an attempt to widen Iowa's dairy field. The fact that the past year has been a very profitable one for the creameries of northern Iowa, will greatly simplify this work, and I believe that next spring and summer will see the awakening of the southern counties to the possibilities of dairying. Needless to state, the success of this movement will be a tremendous thing for Iowa for with dairying on the same plane in southern Iowa as it is in northern Iowa, the return to the state will mean something over $300,000,000 per year—a sum which will well make Iowa's famous corn crop a jealous rival.

MARKET MILK

No material change in our system of inspection of market milk has been made during the past year. A method outlined by Dr. O. P. Thompson, State Dairy Inspector, has remained in vogue, and local milk inspectors have continued to handle the work in their respective towns under his direction. Samples have been sent from the various cities from time to time to our laboratory for bacteriological analysis. Despite the fact that market milk prices are high when compared to prices existing a few years ago, there has been comparatively little complaint. The educational campaigns conducted by this department and various dairy organizations have awakened people to the value of milk as a food and its low cost, when compared to many other food stuffs commonly appearing upon our tables. That the profits derived from milk production are not large was recently brought out by the careful compilation of a large amount of data by Prof. Erf, of Ohio. His figures show that on the average farm it costs $4.33 to produce 100 lbs. of milk and that the selling price is $4.66, leaving a profit of 33 cents per hundred pounds. It is extremely difficult to make any exact statement as to milk production costs, and the figures given do not apply, of course, to all cities, but the percentage of profit will, I think, be found fairly accurate.

Other data regarding market milk prices, which may prove of interest, will be found in another part of this report dealing with an investigation of living costs.

Considerable interest in milk as an indispensable article of diet was aroused in Des Moines as an outcome of the recent Dairy Products Campaign. The matter of increasing the amount of milk in the diet of school children was taken up by the Women's Committee of the Council of National Defense. A Milk Committee of the Council of Defense was finally formed, and through the Council, the Public Welfare Bureau agreed to furnish $500 to finance the experiment.

Franklin School was chosen for the experiment as it is located in district fairly representative of the wage-earning class of Des Moines. The second and third grades were chosen for the experiment, the children ranging from 7 to 12 years of age. Of the 59 children who had complete records 28 were colored. The average daily attendance in the two rooms was approximately 80, but due to the shifting of families, absences, etc., during the period, there were complete records for only 59 children.

The Home Demonstration Agent made a careful survey of the families whose children were included in the experiment. The mothers were advised in regard to diet for the children and a history of the child's health in infancy, whether artificially fed or otherwise, its present diet and the general family history was secured, as well as a record of the home in relation to sanitation and general housing conditions. Among other things the survey showed that about two-thirds of the children had some milk at home with more or less regularity. The other one-third had little or no milk. An effort was made to divide the homes into three classes; fair, medium and poor on the basis of the score card presented later in this report. An accurate platform scale was purchased for weighing the children. A refrigerating tank for the bottled milk was made in the manual training department of the city schools. Straws were provided for use in serving the milk. Before the feeding was begun the children were weighed and measured and given a thorough physical examination by Dr. Fred Moore. The table of weight in relation to height and age, prepared by Dr. Thomas D. Wood, was used in determining the approach to average normal weight.

The children were given one pint of milk each day for approximately three months. One-half pint bottle was given at the close of the morning recess and another bottle at the close of the afternoon recess. The milk was taken from the bottle with a straw. Every child in the group took the milk with evident relish in spite of the fact that many of the mothers told Miss Campbell that their children did not care for milk and had refused to drink it. At the close of three months the children were again weighed, measured, and examined by Dr. Moore, assisted by the school nurse. Of the 59 children having complete record, 54 gained weight. The average normal gain was computed from the chart furnished by the Bureau of Education.

Average Normal Boys: Of the twenty-one boys in this group, 19 gained weight. One boy gained 6 pounds and three others gained 4 pounds each. Average normal gain 1½ pounds. Average actual gain 2⅓ pounds. Excess over normal per individual 5-6 pound.

Minus 10 per cent Boys: There were eleven boys in this group. Nine gained weight. One gained 4 pounds and four gained 3 pounds each. Average normal gain 1½ pounds. Average actual gain 2¼ pounds. Excess over normal per individual ¾ pound.

Average Normal Girls: The nine girls in this group all gained but one. One girl gained 9 pounds, one 6 and another 4. Average normal gain

1½ pounds. Average actual gain 3½ pounds. Excess over normal per individual 2 pounds.

Minus 10 per cent Girls: The eighteen girls in this group all gained weight. One gained 4 pounds and another 3½. None gained less than one pound. Average normal gain 1½ pounds. Average actual gain 1 5-6 pounds. Excess over normal individual ⅓ pound.

The failure of some children to gain was readily accounted for. One boy suffered a broken arm, some had chicken pox, others suffered from bad tonsils or nasal obstructions. The physician and nurse were agreed that the physical condition of the group was decidedly improved. All the children gained in height, some over an inch.

The teachers reported improvement in the mentality of the children, a very decided improvement being noticeable in several cases. The work in both grades improved and the application given the work of the later afternoon was greatly improved.

This department published a leaflet, "Milk, Nature's Ideal Food" and 1,785 copies were distributed in Franklin school district and some adjoining territory by the Block Sergeant organization. A meeting of the mothers of the district was called for June 2. The attendance was only fair, due to heavy rain. The mothers present expressed their satisfaction with the milk feeding and announced their determination to give their children more milk in the future. Dr. Moore spoke to them on the necessity of milk in the diet, and the Home Demonstration Agent discussed methods of introducing milk in the diet by means of soups, custards, etc.

The experiment attracted considerable attention throughout the state and it is safe to say that to this one source alone can be attributed a large increase in milk consumption. I believe that the people of Iowa are now aroused to the food value of milk and that the average expenditure of money for this product will greatly increase within the next few years.

ICE CREAM

Despite the fact that the ice cream manufacturer has had many difficulties with which to contend, the past year has been on the whole a very successful one for those engaged in this branch of the dairy industry. A conservative estimate of the income received from ice cream manufacture during the past year places the figures at about $6,600,000.

Prices of every commodity entering into the manufacture of ice cream increased rapidly during the past year, and the ice cream dealer was forced to raise the price of his product accordingly. Conditions were such that manufacturers were forced to set a fairly standard price and abide by this figure in order to continue to do business. Had the old cut-throat methods of doing business prevailed, results would have been extremely serious for the industry.

The shortage of sugar has been extremely serious, and manufacturers have been forced to pay unheard of prices in order to keep supplied. Indications point to the fact that the situation next summer will be grave. The feeling is general that unless something is done to bring about a reduction of sugar prices, the ice cream industry will be greatly menaced. The action of the Federal Government in failing to take over the Cuban sugar crop early in the year, has been the cause of severe criticism by ice cream dealers.

CONDENSED MILK

The condensed milk manufacture in Iowa has been slightly under $1,000,000 the past year. Considering the heavy export demand for this article I believe that Iowa is not producing as much of this product as it should. In fact, Iowa is not producing enough condensed milk to supply its own demand. If the farmers of Southern Iowa, in particular, could be induced to go into dairying on a large scale, I believe that a large number of condensaries could be profitably started in that field. The domestic demand for condensed milk is growing larger each year, while the export demand is certain to continue heavy for a long time.

CHEESE

With the exception of northeastern Iowa, cheese manufacturing continues to be an almost negligible proposition in this state. That section, however, has seen a steady increase in output—a total of $330,000 worth of cheese being manufactured in the state during the past year. Practically all of this is produced in Allamakee County. Here, again, appears to be a good opening for farmers in southern Iowa. The manufacture of cheese does not entail a large investment and the market is unquestioned, for as is true of condensed milk, Iowa does not begin to produce milk cheese to supply its consumptive demand.

FOOD AND SANITARY INSPECTION

Because of the high cost of staple articles of food, a rigid examination on the part of our food inspectors was especially important this year. High prices compelled the housewife to buy more carefully and attempt in every possible way to keep the grocery and meat bills at a minimum. As a result, a large number of substitutes appeared on the market and this fact combined with the necessity of saving every ounce of perishable foods reaching the market, made it imperative that a thorough system of inspection be carried out.

The enactment of the Egg Law by the 38th General Assembly added to the duties of the inspectors but we believe that the results obtained fully repay any expenditure of time or labor.

During the past year the local slaughtering of beef and hogs has greatly increased and, where conditions justified, we have encouraged the movement. It has always seemed to me to be poor economy to have Iowa meat going to Chicago to be slaughtered and dressed, and then returned to this state to be sold. Here again, however, the growth of the movement has meant a considerable expenditure of time and labor in assisting men engaging in this business to commence operations in conformity with the requirements of the Sanitary Law.

Despite the rapidly growing number of food establishments in the state, we believe that the high standard of sanitation has been maintained. Frequent inspections have been made throughout the state and no unsanitary condition coming to the attention of the department has been permitted to exist.

The acute sugar shortage has also absorbed considerable attention from our inspectors. Not only have substitutes appeared which required attention but numerous complaints of hoarding and profiteering were received which necessitated frequent investigations. This subject is taken up more fully elsewhere in the report.

The substitution of saccharine in place of sugar, a measure to which many housewives are being tempted to resort in these days of shortage and high sugar prices, may involve menace to the health, and its use is condemned. Saccharine is a harmful drug and should not be used in foods. It has no food value, while sugar is a very highly concentrated food. The laws of Iowa forbid the sale of foods containing saccharine as does also a Federal law. The manufacturers of this product have exploited its use as a substitute for sugar through extensive advertising and the Federal Government is prosecuting one of these firms for labeling its product as harmless and shipping it into interstate commerce.

EGG INSPECTION

The Egg Law is a measure designed to regulate the traffic in eggs in such a manner as to prevent bad eggs entering the market channels and thus lowering the market price of good eggs.

Early this year an egg-conference was called by representatives of the United States Department of Agriculture. This meeting was held at St. Louis and most of the Dairy and Food Commissioners from the leading egg shipping states were present. This conference drew up what is called the uniform egg bill and presented it to the legislatures of mid-western states. This bill in an amended form has been passed in Iowa, Missouri, South Dakota and Illinois. The Iowa law differs from the uniform bill only as regards the amount of the license fee which in the uniform bill is two dollars.

Iowa is among the leading, if not the leading, state in the number of eggs produced, and the value of the egg crop. No reliable information is available showing the number of eggs produced in Iowa last year, or the value of this cash crop. However, the Iowa Census (1915) for the 1914 crop places the figure for production at 120,930,552 dozen, valued at $20,593,720. This figure for production must have been greatly exceeded during the past year. During the months of March, April, May, June and July, 1914, the Iowa farmer received 16 cents a dozen for his eggs while this season the farmer has averaged over 36 cents for them. Based on this 36 cent price, 120,930,552 dozen (production for 1914) would be worth $43,534,999.74.

The present high prices being received by the producer for his eggs calls to mind, by contrast, the prices received by him a few years ago. The following tabulation is of value to those interested:

AVERAGE PRICE PAID TO IOWA FARMERS FOR EGGS ON THE FIRST DAY OF EACH MONTH OF THE YEARS SHOWN

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1910	28	28	21	18	18	17	16	14	17	20	22	25
1911	26	21	14	13	14	13	12	12	14	17	20	25
1912	27	28	23	17	17	16	15	16	17	19	22	25
1913	23	20	17	15	15	16	15	14	16	19	23	29
1914	27	26	22	16	16	16	16	16	20	21	21	26
1915	28	30	22	16	17	16	15	15	16	20	23	27
1916	28	27	22	17	18	19	19	20	21	26	30	34
1917	35	36	33	25	30	31	27	28	32	34	35	39
1918	42	47	38	30	31	28	28	33	33	39	42	51
1919	56	45	30	34	37	38						

If the above table included prices for a few years previous to 1910 it would show that it has not been very long since the farmer received but eight to ten cents a dozen for this important staple. While this is all past history, these facts are interesting in that they throw light upon some of the reasons for the present high prices of other food commodities.

Iowa has also a reputation for the quality of eggs produced, but there is still room for considerable improvement in our methods of handling. In commenting on these subjects, a well known Chicago buyer says, "I consider the eggs produced in Iowa where the principle feed of hens is corn, are better when originally produced than any eggs in this country, for in those sections where the hens are fed largely on wheat, barley and oats, or the Southern cotton seed meal, the eggs do not have the body and flavor that the eggs from Iowa have, for the reason given. The thing that has always been lacking has been the way eggs have been handled before leaving the state. This law of yours will certainly stimulate better handling by the farmer dealers. and more prompt shipment.

"The next great question in my mind in connection with the egg industry in your state is that there should be a greater production from the number of hens you have. This is a matter, however, that cannot be handled by legislation, but it is one of education. Most of your farmers never realize the possibilities of egg production, and usually when it is shown them they exclaim in the language of a noted cartoonist, 'I NEVER THOUGHT OF THAT.' "

Both the Food Law and the Egg Law make it a misdemeanor to sell eggs which are decomposed. The logical assumption is, therefore, that all eggs offered for sale either to egg buyers, to storage houses, or to the consumer are free from eggs which are decomposed. To one acquainted with the detail of egg grades and the demands of buyers of eggs for storage, it would seem that under the Iowa laws buying case count might be considered a good business method. There are, however, many classes of eggs, which while they cannot be considered decomposed within the meaning of the law, are not salable except at a reduced price. Among these classes are "hatch spots," "stale eggs," "weak eggs," eggs with movable air cell, etc., and the "dirties," "under-sized eggs," "double yolks," etc., which likewise command a lower market value. These eggs must be candled out by buyers who ship to the markets consuming the bulk of Iowa eggs. Such buyers must also recandle, grade and repack all lots of eggs bought from country merchants before they are shipped, as the large eastern receivers buy on a quality basis only. It naturally follows, that good business methods demand that buyers buy on a "loss off" basis and deductions for losses made on a basis of market value of the lots bought.

It has been fitly said: "an egg is no better than its shell." An egg with a dirty shell, no matter how good its contents is graded as a "second" or a "dirty" before being sent to market and as such commands the price of a second or dirty only. This spring there has been an excessive number of "dirties" produced and the resultant losses to producers have been heavy. With but little care and attention, proper nests can be provided; the saving in value of the eggs produced will adequately repay the producer for the small additional expense incurred incidental to producing cleaner eggs. Merchants receiving an excessive number of dirties can help secure a better market for the eggs produced in their vicinity as well as confer a favor on their patrons if they will see that the bulletins on eggs issued by the Iowa State College at Ames are widely circulated in their communities.

For the purpose of securing a wider distribution of the new egg law, and the rules and regulations issued pursuant to it they have been reprinted in this bulletin.

WHO MUST BE LICENSED?

The law requires the following classes of dealers to take out egg dealers' licenses:

1. All merchants, hucksters and others buying eggs from producers unless such producers are also licensed egg dealers.

2. All dealers, regardless of the nature of their business, who sell eggs in quantities in excess of one case at a time.

The following are not required to take out a license.

1. Merchants who buy all their eggs from licensed dealers and who do not sell in lots greater than one case.

2. Farmers and other producers of eggs who do not sell for trade in eggs other than those produced by them or their tenants.

3. Bakeries, restaurants, etc., buying eggs for their consumption only are not classed as engaged in the business of dealing in eggs and are, therefore, not required to secure a license to buy the eggs consumed by them.

The licenses now being issued expire March 1, 1920, at which time a new license must be taken out. A suitable blank for applying for the license will be sent to each dealer having a license expiring on that date, before it expires.

EGG CANDLING

There is only one method for distinguishing good eggs from bad ones or which can be used for the purpose of grading eggs, and the method is candling. Numerous candling devices have been invented and sold but none but the single hole candle operated in a darkened room has proven satisfactory as regards accuracy of candling.

An egg must be turned before the light before the character of its content can be determined. For this reason candling devices designed for handling more than one egg at a time can not be used for accurately distinguishing good eggs from those the purchase and sale of which is prohibited under the egg law. Owing to the fact that there were numerous multiple hole candlers, such as the "three dozen candler," etc., in use at the time the egg law went into effect, it was considered that notice should be given before the use of these candling devices be prohibited. For this reason multiple hole candlers have been approved for use this year under certain conditions.

RULES AND REGULATIONS GOVERNING ISSUANCE OF LICENSE

1. After May 25th, it is necessary that all dealers engaged in the business of buying, selling, dealing in or trading in eggs, except those retailers who buy direct from dealers having an Iowa license and who do not sell in lots greater than one case, obtain an egg dealer's license.

2. The license fee is $1.00 for the period ending March 1st each year.

3. A separate license must be obtained for each place of business where eggs are bought.

4. Each license is numbered and numbers are usually assigned in the same order as applications are received.

5. Farmers and other producers of eggs are not required to secure a license for the purpose of selling or trading in eggs produced by them.

6. Buying, selling, dealing in or trading in eggs in violation of the egg law, by any person, firm or corporation is an offense and renders the offender subject to a fine of not less than $10.00 nor more than $50.00.

RULES AND REGULATIONS GOVERNING LICENSED EGG DEALERS

1. The first licensed buyer of eggs (the huckster, the local retail merchant, or others) shall candle every lot of eggs that he buys (this should be done before settlement is made).

2. The licensee shall discard all eggs known as "addled," "moldy," "black-rots," "white-rots," "blood rings," "adherent yolks," eggs with bloody or green whites, eggs incubated beyond "blood ring" stage and all other eggs commonly classed as inedible.

3. The licensee shall pay only for good, edible eggs.

4. The licensee shall return to the producer, if requested or if possible, the "rejects" for the producer's own examination.

5. The good eggs shall be kept in a cool, dry place until sold or shipped.

6. Eggs should be shipped to cold storage within forty-eight hours. If held longer than forty-eight hours they must be recandled before shipping unless they are kept at a temperature of less than sixty degrees Fahrenheit. If kept at a temperature of from forty to sixty they must be recandled if held more than seven days. If kept below forty degrees no recandling is necessary.

7. Eggs known as "large hatch spots," "heavily shrunken eggs," "settled yolks," and "leaking eggs," are fit for consumption but will not stand transportation. They should be used only by the home community.

8. All "checks" and " cracks" shell eggs should be shipped in cases stenciled that they contain crack or check shell eggs.

9. All receivers of eggs should use care and intelligence in handling them, always keeping in mind that it is a waste of eggs, fillers, flats, and valuable transportation space to ship "rejects" or other eggs of doubtful character.

10. "Rejects" shall not be sold for human consumption.

11. Eggs unfit for food must not be held in possession unless they are broken into a suitable container and denatured so they cannot be used for human food.

The following denaturants are approved for general use; carbolic acid, creosote and crude oil.

Special denaturants for special purposes shall not be used unless approved by this office.

12. Dirty eggs and washed eggs should be used where produced. They must not be accepted except at a reduction in price equivalent to their market value.

13. All merchants, dealers and hucksters shall after candling eggs place on the top of every case of candled eggs a certificate stating the date of candling, by whom candled, and license number of licensee. This certificate shall be of the following form: (Note—this form should not be smaller than 2⅜ by 4¼ inches.)

This case of eggs is packed and candled in compliance with the Iowa Egg Law and regulations provided for therein.

Candled .... by ....
DATE NAME OF CANDLER

Iowa Egg License Number..

HENERY PRODUCE CO.
Nester, Iowa.

WEIGHTS AND MEASURES

The special and routine work of the Weights and Measures department continues to constitute a large portion of our work. I have found it necessary to assign the entire time of three men to the duties of heavy scale inspection and to use such time of our Food and Dairy inspectors as they could spare to the inspection of counter and cream scales in retail establishments and cream stations. With the prevailing high prices for all commodities, the necessity of accurate scales and weights is apparent. Demands from grain and stock buyers, farmers, and merchants for emergency and periodical inspection of their scales have been exceedingly heavy. Mine owners and miners have also made frequent demands for this work. Dealers, consumers and workmen have all learned to have confidence in the accuracy of the scales approved by this department, and insist on frequent inspection to insure fair dealing. The department is also called upon to make a large number of special trips for inspections for which private companies are willing to defray the expense.

As competition has grown keener and prices have risen higher, the number of requests for scale inspections has doubled and trebled. The department, with the number of inspectors at its disposal, has been unable to answer requests as promptly as should be done. There is also a great deal of correspondence resulting from daily reports of inspectors, shortage reports from various sources, warning reports, requests for scale inspection, prosecutions, complaints and reports of similar nature, which demand a large amount of attention from the Chief Inspector of Weights and Measures.

The department has nothing but the highest praise for its employes for their earnest, conscientious and efficient efforts. They have put in many hours outside of their regular time without complaint. They have been compelled to work long hours because of the fact that the force has been inadequate to handle the material increase which has taken place from year to year.

During the year ending November 1, 1919, the department inspected 2,850 "heavy" scales, that is, scales used by grain elevators, coal mines, retail coal dealers, railroad stock scales, etc. The revenue received by the State for the inspection of these scales amounted to $8,549.45. The average charge for the inspection of wagon scales is $3.00. The revenue received by the state for scale licenses is $4,821. Of the number of scales inspected, 407 have been condemned for repairs; more than 350 were adjusted or their operators were instructed to make changes that would render them accurate.

Since the Law became operative, hundreds of scales and measures of various types have been confiscated and condemned. The use of the auto truck has been the cause of many new wagon scales being installed as the capacity and construction of a great many scales is such that they are too light for the loads which are now being hauled. The department records shows that there have been 5,000 platform scales, 10,219 counter scales, 3,760 creamery scales inspected. These items do not include the number of weights submitted by cities, firms and individuals for verification as to their accuracy.

IMPORTANCE OF WORK

The Weights and Measures departments throughout the United States, during the period of the world war, put forth every effort to do their bit, by checking more closely than ever before the weights and measures of the thousands of commodities so sold. The prices of commodities since the close of the war have soared even higher and hence it is necessary to increase our activities. Few people realize the importance and wide scope of the Weight and Measure inspector's field. Iowa's billion dollar crop must be weighed. Her thousands of cattle, hogs, and sheep must all be driven over the scales before being sent in to the market. The dairy and poultry products, garden truck, orchard crops, wool and the numerous other such products of Iowa are sold by the pound. Seven million tons or more of coal, and thousands of tons of gypsum rock mined in Iowa are weighed over scales whose accuracy is determined by the State Weight and Measure Inspectors, and still we have not mentioned the many millions of dollars worth of groceries and dry goods purchased by Iowa citizens annually, nearly all of which are sold by weight or measure.

High prices have resulted in a noticeable tendency toward short weighing on the part of a number of dishonest merchants. The fact that selling 15 ounces to the pound has proved a profitable source of income at present prices, was too big a temptation for some merchants to withstand. This department has attempted to impress upon the housewife and the public in general the necessity of buying by weight. The necessity of being especially careful in purchasing from street venders has been impressed upon the consuming public, but despite all of our efforts, frequent cases of short weights continue to appear. To carry on this work effectively, more men should be added to our force. A common source of dishonest practice on the part of some merchants, generally considered reputable, was found to be the advertising of a certain commodity at an unusually low price and then making up the difference by short weighing on this particular commodity. In every instance where short weighing was found to be in vogue, the department inspectors were instructed to prosecute relentlessly, heavy fines usually resulting.

One important phase of this work which is necessarily neglected because of an insufficiently large force of inspectors is the work of cream scale inspection. With butter fat selling at its present high figures, it is easy to see that a faulty scale can mean considerable financial loss to either the buyer or the seller. This work, as stated, has been greatly neglected inasmuch as we have been forced to depend upon our Dairy and Food inspectors to make these inspections in addition to their routine work—something which they really have not time to do.

The department has done some work in checking gasoline pumps and measuring devices and we have recently purchased a practical standard for this purpose with the result that during the coming year we will make a thorough survey of these pumps. Our investigations show that a considerable number of these pumps are inaccurate and we feel that, in the interest of the consumer, more attention should be given to this part of the work.

FEEDING STUFFS

Medicated stock foods appeared in this state this year in larger numbers and greater quantities than ever before. The department has been called upon to analyze a large number of these preparations for feeders throughout the state. In many instances, complaint was made that the stock food either caused the animals (usually hogs) to become sick or, in some cases actually killed them. A remarkably similarity in the composition of these preparations was found, and we are unable to tell the exact cause of the trouble from the information furnished. However, we doubt the advisability of promiscuous medication of farm animals.

In the past Iowa stock and hog raisers have been exploited by manufacturers of inferior and frequently worthless medicinal stock food. However, with the changes in the laws which we hope to see adopted very soon, we believe that the situation can be effectively curbed.

Good authorities tell us that six and eight-tenths pounds of corn fed to a good beef steer will produce one pound of live weight worth 16 cents.

This same feed or its equivalent in cost will produce a pound of butterfat worth 60 cents when fed to a good dairy cow.

You must sell the steer before you get the 16 cents and you have nothing left. After receiving 60 cents for the butterfat you have the cow left to go on and produce her like and continue to act as a source of income.

The difference between the price that the steer returns for the feed and what is received for the butterfat is 44 cents. We think this fair compensation for your labor.

LIVING COST INVESTIGATION

By your direction, I started late last summer to make an inquiry into cost of commodities in common usage with a view of attempting to fix the responsibility for the high prices which have been prevailing for some time past.

With this end in view I formulated a series of questionnaires asking the buying and selling prices of a large number of articles commonly utilized by residents of this state, and distributed several hundred of them to the department inspectors. Independent investigations were also conducted by the Deputy Commissioner, the Chief Inspector of Weights and Measures and myself, at the same time.

The facts contained in the returned questionnaires were carefully tabulated and compared with a large amount of other data which had been collected. Where evidences of unusual or unfair profits were apparent, the matter was taken up with the responsible merchants. The fact that he was aware that he was under surveillance usually sufficed to cause the merchant to revise his prices.

In considering the situation it was found that there were a number of reasons entering in to bring it about.

1st. The drain on the resources of the world by a long period of under production due to war conditions.

2nd. The extravagance of the public.

3rd. Too wide a spread between the price received by the producer and that by the consumer.

- (a) High cost of doing business.
- (b) Cumbersome methods of marketing and delivering.
- (c) Profiteering.
- (d) Speculation.

Regarding the first point, little need be said. Everyone, of course, realizes that with war as the world's industry for practically four years and a half, there was a great decrease in the amount of energy devoted to the production of things which we require as civilians, and that whatever surplus existed in these commodities, would soon be exhausted. Such, indeed, has been the case, and we ended the war with an acute shortage staring us in the face.

Things will never be as cheap as they were before the war; to make them so, the cost of all raw materials must come down, and labor must prepare itself to receive lower wages. Most of the relief to be secured will come from the education of the public, the rest from legislation.

In conducting this investigation an attempt was made to avoid the mistake of starting it with too much publicity and too many promises, for we of the department realized that too many investigations of like nature had started as thunderous sounds and ended as faint hollow echoes, while a patient public waited in vain for results. We knew from the beginning that our laws as they stand at present are inadequate to bring about any great relief through legal measures, and we determined that this investigation should be more in the nature of an attempt to obtain a fair knowledge of the underlying causes of the present high level of prices and to make some recommendations for the alleviation of the evil rather than to defeat the very purpose for which the investigation was started by the recommendation of unsound, uneconomic laws. For this reason an attempt was made to obtain a clear understanding of the problems confronting not only the consumer, but the producer and distributor as well.

Realizing that the merchant's selling prices depended not alone upon the price he had to pay for his merchandise, but upon certain other factors entering into their scale as well, we attempted to make as good an estimate of these factors as our limited resources and the nature of the work would permit. Chief of these factors in importance are the cost of doing business and the "turnover," the latter being, in reality, a mere subdivision of the former, but treated during our investigation as a separate factor for a special purpose which will be apparent later. But whether taken separately or as one factor, their part in the consumer's buying cost is, of course, highly important.

The consumer who sees an article priced at a certain sum at one store and then discovers that the same article can be obtained at a considerably lower price at another store, is apt to jump to the conclusion that the first merchant is profiteering, unless he or she stops to consider the difference in the cost of doing business between the two. It is, of course, easy to see that the merchant who conducts an elaborate establishment, gives elaborate selling and delivery service, and does his business on a credit basis must, of necessity, obtain more for his goods than the merchant whose establishment is simply appointed, who does business on a cash basis and who makes no deliveries—who, in other words, operates on a "cash and carry" basis.

That there is a great difference in the cost of doing business, may be seen from the following brief summary of an investigation conducted in one Iowa city.

Figures from thirty merchants, (grocers and butchers), doing an aggregate business of $589,448—an average of $19,981.60 were compiled. The average cost of doing business was 18.26 per cent the lowest 6.82 per cent, and the highest 35.9 per cent. Obviously, if the merchant whose "cost" was the lowest and the one whose "cost" was highest were handling the same kind and quality of goods, the patrons of the second merchant were paying extra for something, this "something" in this, as in most similar cases, being elaborate service.

There is a place for elaborately appointed stores and expensive service in our economic life or they would cease to exist. There is no reason why these shops should not be patronized if the consumer is willing to pay the price and feels that he is justified in so doing. The point is this: —extravagance is a relative matter; what may be extravagance for one man may not be for another. Obviously, the purchase of a $5,000 automobile would not be a source of serious inconvenience to a man with an income of ten times that amount, but for a man with an income of $2,500, it would be the height of folly. The same thing holds in the purchase of clothing and other commodities. The wife of a man in only moderate circumstances is doing herself and her family a great injustice by attempting to vie with the wife of a wealthy man, in making purchases. Unfortunately, there appears to be a strong tendency toward this very thing, and this competition is encountered in all strata of our social system.

Labor for the most part, is receiving more money than ever before, but it is also spending more—and this increased expenditure does not appear to be entirely a matter of increased living costs. The wives of laboring men are spending money freely for things which they, themselves, would have considered undreamed luxuries a few years ago. It is not my desire to appear to favor any lowering of the standard of living in the country. I fully believe that the working man is entitled to a good living and a decent amount of recreation, but I believe just as firmly that the amount he or anyone else spends for his living and this recreation, should be in accordance with the income he now receives and may reasonably expect to continue to receive. In other words, I believe that before any man should raise a cry against high prices, he should make an examination of his income and out-go. If an addition of $10 a week to his wage means to him only an additional $10 to be spent for the theatre, motion picture show, clothing, etc., he has little cause to protest against the "high cost of living" when just such procedures as this is one of the important contributing factors to increased living costs. I firmly believe that if every wage earner would keep a careful record of his expenditures he would be disagreeably surprised at the large amount of money he is spending for things other than necessities—and at the comparatively small percentage of his salary he is saving.

I do not condone high prices nor do I wish to intimate that all of the financial difficulties which the wage earner is today encountering are matters over which he has control, but, as stated, I do believe that we are now witnessing a time when extravagance is running riot. That money is being spent freely for articles which border perilously near the line of the non-essential is evidenced by the flourishing business being done by fashionable shops for women, (and men), jewelry stores, and food dealers handling expensive delicacies, to say nothing of motion picture theatres, de luxe restaurants, etc., and a surprisingly large share of the money being spent in these establishments is being spent by people who work on a per diem basis.

Old time practices of economy will be a big factor in relieving the situation. The empty garbage can in the city, and the empty swill pail on the farm helped win the war, and they will both help in the battle of the high cost of living. As long as we indulge in our present extravagant tastes, it ill-behooves us to wail about high costs. The wearing of half-soled shoes and patched or threadbare clothes should not be considered a disgrace. But the casting aside of half worn clothes is not the only foolish thing we do; we buy the most expensive things we can find to replace them. Brown or chocolate colored shoes cost about $1.50 more per pair than black shoes of the same make, materials and workmanship. How many pairs of black shoes do we see people wearing today? Two suits equal in quality of material and workmanship, vary from $5 to $10, and more in price and yet people pay the higher price for the privilege of buying in a "smart" place—and must pay for the overhead charges. And these are but a few of many similar instances.

Just as long as the buying public insists on giving merchants to understand that they want nothing but the best and highest priced wares and goods; just as long they will take on credit or pay for any foolish little fancy luxury which attracts their eyes; just as long as they continue to refuse to consider the prices asked for goods, will high prices continue. The merchant is keenly responsive to the pulse of public buying; if the fever of buying expensive luxuries is epidemic it is not difficult to understand why he would increase prices. The larger responsibility rests upon the buying public; if people would refuse to buy, prices would soon drop. The attitude of many merchants was well expressed in a recent cartoon when a representative of this class is made to say; "Profiteer? Of course I'm a profiteer. I've never seen so many boobs who are trying to get rid of their money. We can't mark up prices fast enough to keep them from buying. The more expensive an article is, the more determined they are to buy it. If they want to throw money away, that's their business; we can't turn 'em out of the store."

It would be amusing if it were not so serious to hear men or women, every time two or more get together, rant and rave of high costs, "grafting," "profiteering," "crooked officials," "inefficient public servants," etc., and to listen to their furious demand that "the government do something to put a stop to it." The fact that these women were setting a furious pace in their attempt to outstrip each other for the honors of being the best dressed, the fact that they were buying $12.00 silk shirts and $45.00 to $75.00 leather coats for their 13 year old boys, the fact that 15 year old daughter has not worn a pair of stockings other than silk to school for the past three years, never seem to occur to them as having any bearing on the high costs at which they so vehemently protest. And father, probably following son's example, buys $3 or $5 neckwear when he could get a neat tie, which would serve his purpose just as well, for 85 cents if he would step around the corner to another store. If one were to call the attention of these people to the fact that they were not a little responsible for present inflated values, they would probably answer that this expenditure was necessary to "maintain one's social position." This is the root of one of the chief reasons for this present orgy of buying—a desire to "Keep up with the Jones." Mother must not be outclassed by "Mrs. Smith;" son must have expensive "nobby clothes" like all the other fellows;" daughter must wear silk stockings because wool or cotton stockings "look frightful, and Sadie Smith or none of the other girls wear anything but silk, and even Stella Brown whose father drives a coal wagon, wears them;" and father feels that his business success warrants purchasing clothes in keeping with "his position." You meet it in every stratum of our social life, this desire to out-do the other; even those who realize the foolish extravagance of it all have not the moral courage to combat the movement, but continue to "put up a bluff," Verily, it is a case of too much front and too little backbone.

To the wide extension of credit on the part of merchants no small share of the blame is due. It is this granting of credit which enables the stenographer who earns $14 a week to wear two or three hundred dollar fur coats, $16 shoes and $3 to $5 silk stockings.

Only a few people appear to understand that every article manufactured and sold has only a certain set value to the consumer or user. Any mark above this value is inflated, and comes to the tradesman only when a buying public grows reckless and pays any price asked. Unfortunately, in general, it is only people who can best afford to pay, who appear to understand this fact. It is not the wealthy families who are spending money freely; it is mainly people who have but recently tasted comparative prosperity.

For example, there is a banker in northern Iowa who, in the course of a recent convention, said that his wife had refused to pay $25 for a hat at the local millinery store. Imagine her surprise when a week later her maid of all work, who received $8 a week, arrived at the house one afternoon with the $25 hat. The banker's wife had bought an $8 hat, feeling that the $25 hat was too expensive. This banker can write a check for $100,000 any day. However, his wife's maid is the only one who can afford a $25 hat in his house. The banker's wife knows that a hat is worth just so much to her, and no more. The maid has yet to learn that lesson.

Another woman called me on the telephone recently and said that she was the victim of a profiteer. I asked her what she had purchased, and where. She told me she had purchased a silk shirt for $12 and that now the shirt was at her house, and she had inspected it, she felt that she was a profiteer victim. I asked her if she had priced other shirts in the store in question, and if any were lower in price. She said "yes" to both questions. I asked if the shirt was for her husband. She said, "no, it is for my boy, he's 13." And we talk of the high cost of living.

Scarcely a man or woman buys clothes today without complaining of their cost, yet, if a casual observer would take note of their purchases, he would discover that, in many cases, they will not even consider low priced merchandise.

The insistence of the public upon cloth made from fine wools is a large factor in the high prices of clothing, according to William M. Wood, president of the American Woolen Company, as related by the daily press. "If our people would consent," was his conclusion, "to wear good, substantial, durable clothes made of the coarser wools, clothing could be purchased at considerably lower prices than those which now prevail."

His statement in part follows: "It is generally thought that the cost of cloth is the controlling factor in the cost of clothing, but the fact is that the cloth cost is less than half the cost of the completed suit, and other factors contribute quite as much to the price of clothing.

"In the last five years the price of cloth in the ordinary suit of clothes has advanced no more, indeed has advanced a little less, than the cost of labor and other materials that go into the making of the suit. The following figures show this, which I have from a manufacturer and merchant of clothing of the highest prominence in Boston.

"The cost of the cloth in 1919 for a suit of clothes of a particular grade is $13.67. The corresponding cost in 1914 was $4.58, showing an increase in the cost of cloth of $9.09. The 1919 cost of making this suit is $14.47. The corresponding cost in 1914 was $4.98, showing an increase in the cost of making of $9.49.

"These figures show that cloth contributes slightly less than labor and other materials to the increased cost of clothing. Therefore, to your question why prices of clothing continue so high thru-out the country, the reply is because the cost of labor and cloth and other materials that go into clothing continue so high."

After pointing out that there is a shortage of cloth and clothing in the markets of the world, which "always means high prices," and that "almost every material and every process involved in the manufacture of clothing" has to pay a heavy tax, both state and federal, Mr. Wood continued:

"In a measure during the war, and to a greater extent since, there has developed a curiously insistent demand for cloth made from the finer and more expensive wools. People will no longer buy cloth made of the coarser and consequently cheaper grades, although clothing made from these wools is both servicable and sound.

Before the war, the demand for these finer grades of cloth was chiefly —indeed almost exclusively—from the more fastidious in taste, but now everybody demands the finer cloths and nobody will take anything else.

"We recently made up a sample of cloth in which coarse wool was used in the warp only. The appearance of the sample was but slightly different from that made of finer wools. It had in a marked degree, the smooth, soft texture of fine wool.

"Its cost was considerably less than the fabric made of the finer grades. As a cloth it was good, strong and serviceable. Before the war it would have sold readily, but we were absolutely unable to put it on the market. Our selling agencies told us that there was no demand for it; people would not buy it; that customers insisted on fine, smooth, soft fabrics and that, accordingly, the manufacturers of clothing would not buy this cloth it we made it up in quantity, because they could not sell clothes made from it.

"To our suggestion that when people were complaining of so high prices this cloth that would make a difference of $5 in the cost of a suit, ought to sell readily, the reply was that $5 in the cost of the cloth for a suit of clothes did not count at all these days; that the people demand the best and would put up with no other.

"Nor is this all. While during the war the supply of coarse wools has remained about stationary, there is now a shortage in the world's supply of finer wools of about 200,000,000 pounds.

The action of our government has still further contributed to keep prices up. "During the war, agents of our government purchased from the British Government some 100,000,000 pounds of Australian wool. When the armistice came they released or transferred two-thirds of this wool back to the British Government. The one-third which our government held they offered only in limited quantities, the keen competition for which carried it to tremendously high prices. Recently the government sold some of this wool in Boston at $2.75 a pound.

"I am not criticising government officials. They doubtless felt justified both in returning this fine wool to England and in getting the highest price possible for the wools they have on hand. They are selling these wools at prices far in excess of what they paid and therefore making a profit for the government—which I assume they think highly creditable to themselves.

"But when you put the question, why do our people have to pay such high prices for fine clothing which they insist on having, you must not forget that one of the reasons for it is that the government is holding the wool which it bought at war prices for a profit."

One danger in conducting investigations of living costs is the likelihood that unfairness will be shown towards the producer of food stuffs—in other words, the farmer. The idea is prevalent in this country that the average farmer has amassed a fortune during the past few years. The relating of exaggerated incidents wherein the farmer has profited, the oft-repeated statement that "the farmer is the only independent man in the world," combined with the high market value of his products, suffice to place him in the profiteering class in popular imagination. I hold no brief for the farmer. I believe that the intelligent, industrious farmer of today is prosperous and that he neither asks nor deserves maudlin sympathy, but I do believe that many of the charges made against him are decidedly unjust. His income is the result of his own intelligent effort and hard work. Where he has acquired wealth, it is mainly due to increased land values, and not to enormous profits derived from the sale of his products.

If a survey of commodities in common usage was to be made, I have no doubt but that it would be found that in practically every instance the profits of the producer and distributor of food stuffs would show a considerably smaller percentage than that received by manufacturers and merchants dealing with other commodities. Nevertheless, consumers who pay large sums for manufactured commodities yielding large profits, protest bitterly against an article of food which, although high priced it is true, is sold on a comparatively small margin of profit. The point is this: Prices of food are high but in general they are high because everything entering into their production, distribution and sale are high and the margin of profits is usually small when compared to manufactured goods. In the latter case, although materials may be high, the corresponding costs are usually increased to a far greater extent than is true of food products.

During the month of December, 1919, the price of eggs soared to an unprecedented figure. Immediately a clamor arose which left no doubt as to the attitude of the housewife toward the producer and distributor of this product. Yet the answer to the question as to why eggs were high is not difficult to find. Hens were not producing eggs at that time and, compared to the demand, fresh eggs simply did exist. The cold storage variety was also high, and since the government storage reports showed holdings of forty per cent more eggs on September 1st, 1919, than on the same date the previous year, criticism was bitter. We have made a conscientious endeavor to secure the best information possible regarding the storage situation. Dealers on the New York Market and trade papers interested in this product, were unanimous in expressing their belief that a large proportion of the excess supply was the property of foreign merchants who were simply holding the eggs here because of a lack of shipping space and cold storage facilities aboard. These statements appear to be substantiated by the rapid movement from storage which followed the release of a large amount of ocean tonnage for commercial purposes by American and European army transportation authorities.

The price of butter has also been a source of complaint. Apparently users of butter believe that the farmer is making enormous profits from its sale. Yet, we have thousands of farmers threatening to sell their cows because they find butter unprofitable. Neither statement is true. Dairying is a profitable type of agriculture, but to make it profitable, skill, hard work and intelligent thought are necessary, and, even then, the profits do not compare with that of the manufacturer of many articles of common usage. Everything which goes into the manufacture of butter is high. Labor is hard to obtain at any price. Equipment costs have increased enormously during the last four years. Europe is conducting a campaign to purchase 300,000 dairy cows in this country, and this and other factors have made dairy animals, even poor ones, expensive. The part played by the increased cost of feeding stuffs in high prices, may be illustrated by the following comparison of feed prices in 1919 with those of 1914.

	December, 1914	December, 1919
Bran, per ton	$24.90	$45.50
Cottonseed meal, per ton	31.30	80.80
Corn, per bu.	.50	1.20
Oats, per bu.	.41	.64
Hay, per ton	10.10	17.40
Labor, with board	30.10	55.65
Labor, without board	40.50	72.00

Milk, too, is generally considered too high priced. Compared to a few years ago milk is high at the present time, but instead of complaining about the present prices, the consumer should remember that for many years he has been purchasing milk at far less than the cost of production. Few farmers find the sale of milk profitable even today, as the following table will show the prices he receives per hundred pounds is low.

City	Distribution pays Producer	Wd. by Weight or Measure	Pd. on Fat%	Retail Price	% Below	Price	% Above	Price	% Bulk Milk Sold	Are Products Organized
Waterloo	3.25	Weight	Yes	14c	10	12&13c	30	15 to 20	5	Yes
Des Moines	3.50	Weight	Yes	15c	..	...	2	17 to 25	..	Yes
Davenport	28 to 32	Measure	No	14c	5	12c	10	16 to 20	..	Yes
Dubuque	3.50	Weight	Yes	13c	10	10c	..	..	10	No
Sioux City	4.00	Both	Yes	15c	1	...	..	..	15	Yes
Cedar Rapids	3.60	Weight	Yes	14c	30	10c	2	15	10	Yes
Burlington	3.00	Weight	Yes	12½c	10	10c	..	..	30	No
Keokuk	4.00	Weight	No	15c	..	...	..	..	5	No
Council Bluffs	2.75	Measure	No	15c	5	13c	..	..	..	No
Ottumwa	2.90	Weight	Yes	13c	..	...	..	..	small	No
Marshalltown	....	Weight	Yes	12c	..	...	..	.	33	No
Mason City	3.25	Weight	Yes	...	..	...	..	..	none	Yes
Iowa City	28 to 30	Weight	Both	12½&15c	..	...	..	..	..	No
Muscatine	3.75	Measure	No	15c	..	...	..	..	5	No

The prices mentioned in the foregoing table were those in effect August 5, 1919. Apparently there is a great spread existing between the price paid producer and that paid by the consumer. It must be remembered, however, that for a good part of the year the price paid by the distributor is considerably higher than on the date mentioned, while the retail price remains fairly constant. Then too, the expenses of the distributor are very high per unit; the cost of collection, transportation, pasteurization, bottling and distribution is high. Milk is a highly perishable product and the risks incurred, particularly in the summer, are great. I cannot conscientiously make any criticism of present milk prices, particularly in view of the fact that from a standpoint of food value, milk is far cheaper than a large number of other staples, even at the high prices being paid for it in this state.

The shortage of sugar also has been the source of constant annoyance to both the housewife and the manufacturer of products in which sugar is used. Here are a few facts concerning this situation:

The United States Food Administration has had a sugar adjunct known as the United States Sugar Equalization Board. This board, under the authorities of the United States government, and jointly with representatives of France, England and Italy, was formed for the purpose of handling the sugar productions of Cuba, Porto Rico, the Islands of the West Indies, the Philippine Islands, Hawaii Islands, the Island of Java. From these sources comes practically all of the world's supply of sugar. The price of raw sugar is regulated; so is the price of raw sugar to wholesalers also standardized at nine cents per pound, and not subject to fluctuation. Wholesale grocers must pay their own freight; they are regulated so that their profit cannot exceed 35 cents per cwt., plus 15 cents for handling. The President of the Board has made the statement that a gross profit of 68 cents per cwt., would be the maximum amount that any jobber could take without liability of prosecution.

Furthermore, the sugar bins of the country have been entirely empty. The consumers have been without an appreciable quantity; the retailers have been buying from hand to mouth, and the wholesale grocers could not force sales as it was generally understood that the speculative feature of this commodity had been eliminated. What is the consequence? That practically all of the sugar was held in stock by wholesale grocers, who were unable to move any quantity of it until the demand caused by a good sized crop was upon us.

Speculators in large centers like New York, Chicago, and St. Louis, have been successful in getting a large supply for the reason that they have been in a position to receive inside information several weeks ahead of the other fellow. An extreme shortage would not have occurred had it not been for the Marine strike which continued for almost two months last summer. During that period but few cargoes of raw sugar arrived at our shores, and no vessels departed to the sugar producing countries during that strike.

Furthermore, the beet sugar crop of 1918, which is under the same control, as above mentioned, became exhausted about that time, which radically increased the shortage. Most people have the idea that the

United States produces all of the sugar that it uses. The fact is, that the United States, (including beet sugar production of the country, the cane sugar of Louisiana and Texas, the Hawaiian and Philippine Island cane sugar crop) produces but one-third of the sugar used which means that we must buy more than two-thirds of our gross consumption elsewhere. The sugar consumed per capita in the United States is about 85 lbs.—this means candy, canning and household purposes.

The statement that candy men have had plenty of sugar is true. They bought this year the same as they have done in years prior to the war, during the months of March, April and May, and for summer and fall delivery. Certain others have also apparently been able to get all the sugar required by buying from brokers.

Numerous efforts were made by this department to bring about measures which would relieve the situation, but I frankly admit, that I doubt whether any results were obtained.

I ask however, that those who may be inclined to criticise will remember that the sugar situation is a matter lying without the jurisdiction of the state, and that there was very little open for us to do. We made many very careful investigations of complaints of hoarding, but in no instance did they materialize. In general, I found the conduct of the merchants of the state above reproach; as a matter of fact, comparatively few of them were able to profiteer even if they were so minded owing to the fact that they could not obtain sugar. A number of wholesale grocers in the state did open themselves to a certain amount of criticism by taking advantage of an opportunity to make a profit without the expense of handling the goods by disposing of their sugar contracts early in the year, thus failing to protect their customers. I do not believe that they would have done this had they known that a shortage was impending. Apparently they sold the sugar believing that they could buy more later. That this proved to be a mistake on their part was very evident this fall.

It is extremely difficult to make a comparison of food prices because of the many factors which enter in the consideration of various edible commodities. I believe that after all facts are considered, food stuffs coming from the same class of stores will in general, costs considered, be found to be both reasonable and uniform in price. Perhaps a few illustrations will suffice to show that the percentage of profits in food stuffs is not so great as to be unwarranted. It should be said in explanation, however, that percentages only should be considered in studying the tables as the figures will vary greatly on different dates. The following table will show the prices charged and paid, and the profits received by a certain butcher on a certain date:

Cost of cattle $11.00 per cwt.

18 per cent loin	sells at	21c lb.	$3.78
6 " " flank and kid	" "	10c "	.60
24 " " round	" "	16c "	3.84
17 " " plate and shank	" "	6c "	1.12
10 " " rib	" "	12c "	1.20
25 " " chuck	" "	13c "	3.25
			$13.79
	Less 5% shrinkage		.70
			$13.09
	Cost of cattle		11.00
	Profit		$ 2.09

The books of another butcher give the following figures regarding the sale of various kinds of meats:

Pure lard	Cost 33c	Sold for 38c	Percentage profit 13%
Bacon	" 35c	" " 43c	" " 18⅜%
Hams	" 35c	" " 38c	" " 7¾%
Salt smoked bacon	" 28c	" " 38c	" " 12½%
Salt pork sides	" 29c	" " 32c	" " 17%
Pork loins	" 31c	" " 36c	" " 11½%
Hamburg meat	" 12½c	" " 15c	" " 16¾%

Cost of doing business 18½%. The biggest value is in beef, which gives a good percentage on beef and enables the butcher to sell other articles cheaper.

That prices may vary greatly is shown in the table on the following page.

ADVANTAGES OF DAIRYING

Dairying maintains the fertility of the soil.
Dairying furnishes a steady income.
Dairying furnishes a steady employment of labor.
The market for dairy products is steady.
Dairying utilizes unsalable roughage.
Dairying affords opportunity for increased income.
Dairying utilizes waste land.

RETAILERS' COSTS, SELLING PRICES, AND PROFITS ON MEATS AND MEAT PRODUCTS.

	RETAILERS' COST				SELLING PRICE				AVERAGE PROFIT DEALER	
	Average Cost	Prevailing Cost	Lowest	Highest	Average Selling Price	Prevailing Selling Price	Lowest	Highest	Profit on Each Unit	Percent of Spread on Sales
Beef	18.45	18	12½	33	23.63	15, 20, 35	10	45	5.18	21.9
Pork Loin	35.5		30	39	41.8		32	50	6.3	15.1
Veal Dressed	20.75	18—22	14	25	29	18, 28, 35	14	50	8.25	28.4
Ham, Good Grade	39.1	36—40	34	53	48.2	50	38	60	9.1	18.8
Bacon, Sugar Cured	40.48	36—40	34	53	47-48	45-50	40	65	7	14.7
Boiled Ham	53.1	54—55	40	58	64-5	60-70	45	70	11.2	17.3
Chickens Old, Alive	23.2		22	25	26		24	29	2.8	10.7
Hamburger Fresh	19.6		14	24	25.65		17½	35	6.05	23.6
Bologna	16.84	16—18	14½	25	22.95	22-25	19	30	6.1	26.5
Frankfurts	18.54	18—19	16½	25	24.68	25	20	30	6.1	25
Lard	33.97	33—34	31	41	40.0	40	35	45	6.07	15.1
Lard Compound	29.22	29—30	24	33	34.5	35	30	38	5.3	15.4

Regarding the sale of groceries the following data tabulated from information gathered over a four day period, may prove of interest:

RETAILERS' COSTS, SELLING PRICES, AND PROFITS ON GROCERIES

	RETAILERS' COST				SELLING PRICE				PROFIT	
	Average Cost	Prevailing Cost	Lowest Cost	Highest Cost	Average Selling Price	Mean Selling Price	Lowest	Highest	Profit on Each Unit	Percent of Spread on Sales
Milk	10.6	.11	.09	.12	12.59	12.13	.08	.15	1.99	15.01
Butter	56.6	.57	.54	.58	61.7	.62	.56	.68	5.1	8.2
Ice Cream	112.2	1.10	1.05	1.10	172.7	1.80	1.30	2.00	60.5	35.3
Eggs	42.9	.45	.40	.46	47.35	.48	.42	.55	4.4	9.4
Sugar	10.13	10.10	9.90	10.60	11.20	11.	10.4	11.75	1.07	9.5
Raisins	16.85	-----	10.	25.	20.55	-----	12.	30.	3.7	18.0%
Soda Crackers	18.2	.18	.16	.18	20.6	.20	.18	25.	2.4	11.6%
Calumet B. Pdr.	21.6	24—1⅙	- -	-----	29.3	.30	.22	40.	8.5⅚	27.3—19.4
Price B. Pdr.	35 5	38.	.32	.42	49.3	.50	.45	50.	13.8—12	28. - 24
Salt	2.17	2—1⅓	1.	3.75	2.78	3—1⅓	1.5	5.	.61	22. - 25
Laundry Soap	6.07	4—8	3.75	8.	7.5	5—10	5.	10.	1.43	19. - 20
Toilet Soap	7.43	7½—8	4.	9.	9.35	10.	5.	10.	1.92	20.05
Rice—lb.	12.9	13	7.	15.	15.6	15.	9.	20.	2.7	17.3
Salmon—2 lb.	27.07	-----	18.	40.	32.45	25.35	24.	50.	5.38	16.6
Dist. Vinegar Gal.	26.18	25—35	18.	35.	37.7	35—40	30.	50.	11.5	30.6
Cider Vinegar Gal.	38.4	36—40	33.	45.	51.2	50.	45.	60.	12.8	25.
Cocoa—lb.	41.3	40—44	25.	72.	55.	50.	35.	1.00	13.7	24.9
Navy Beans, Dry	10.2	10	8.5	12.	12.47	12.5	10.	15.	2.27	18.2
Dry Peaches lb.	22.6	20	15.	32.	26.4	26.	18.	40.	3.8	10.4
Corn Meal, Cwt.	5.16	-----	4.00	5.85	6.50	7.00	5.00	7.00	1.34	20.6
Corn Starch lb.	9.1	8.	7.5	12.5	11.5	10.	10.	15.	2.4	20.9
White Flour bbl.	12.67	12.50	11.80	14.20	13.81½	13.80	13.	15.40	1.15	8.3
Condensed Milk Lg.	15.16	15.	.14	.16	17.43	.17	.16	.18	2.27	13.08%
Condensed Milk Small	7.06	7.2	6.5	7.5	8.26	8.	8.	9.	1.2	14.6
Cheese, Full Cr. lb.	36.9	36½ 37	.34	.40	44.9	.45	.40	.50	.08	17.8
Oatmeal, Cwt.	5.54	5.50	5.15	6.50	6.97	7.00	6.30	7.50	1.43	20.3
Coffee, Pkg. lb.	50.08	50.	.35	.54	54.3	.55	.45	.65	3.05	6.4
Coffee, Bulk lb.	39.05	.40	.31	45.5	47.2	45—50	.35	.57	7.07	16.3
Uncol. Japan Tea lb.	48.5	.50	.38	.72	64.2	.60	.45	1.00	15.7	24.4
Pk. & Beans 2 lb. Doz.	1.43	1.40	.90	1.80	1.80	1.80	1.20	2.16	.37	20.5
String Beans, 2 lb.	1.71	1.6 - 1.65	1.35	2.64	2.12	1.80	1.50	3.00	.41	19.3
Potatoes, Cwt.	3.59	3.50	3.25	5.00	4.62	4.50	4.00	6.00	1.03	21.4
Onions, Cwt.	4.62	5.00	3.18	6.50	6.52	7.00	4.50	8.33	1.90	29.1
Oranges, 216 Per Case	6.52	6.75	4.50	8.00	8.65	9.00	6.00	10.80	2.13	24.8
Lemons, 360 Per Case	8.55	8.50	7.00	10.80	11.65	11—12.00	9.00	15.00	3.10	26.6
Bananas, Per lb.	8.03	.08	7.5	.09	11.03	10—12.00	10.00	12.50	.03	26.5
Peanut Butter Lb. Jar	27.04	25.30	.21	.45	34.4	.35	.25	60.	.07	22.
Bulk Peanut But., lb.	20.4	22.	.17	.24	.27	.30	.22	30.	6.3	33.3
Mazola Oil, Per Qt.	67.4	66—⅔	.60	.76	.78½	75—80	.70	86.	11.01	14.5
Douglas Oil, Per Qt.	.60	66 ⅔	.30	.72	70.9	75 .40	.40	85.	10.09	15.3
Butterine An. Fat, lb.	37.8	40.	.31	.40	43.2	45 .35	.35	46.	5.04	12.5
Nut Butterine, lb.	30.3	30.75	.20	.31	34.8	35	.32	37.	4.05	12.9
Peaches, Fresh, Bu.	3.18	3.25	3.00	3.25	3.58	3.50	3.35	3.69	.40	11.1

See preceding page for figures.

These figures have been prepared from the detailed information submitted by dealers, and is designed to show the cost prices of the various commodities, the selling prices and the profits. Costs are shown by an average cost, a prevailing or usual cost, a highest and a lowest cost. Selling prices are shown by these four headings. Profits are shown in cents per unit and also by percentages. Mistakes of various kinds are certain to occur in filling out questionnaires of this nature, and, insofar as they were detected, the errors were eliminated. However, it is possible that there are many errors that remain, yet they tend to correct themselves if it may be assumed that an equal number of prices are quoted too low as well as too high. It is probable that the percentage of profits are fairly accurate for the different commodities. From these percentages it is not possible to determine accurately the average mark-up of dealers as an arithmetical average would mean very little. If the percentages were weighted in proportion to the sales of the average retailer, it is probable that the mark-up would be found somewhere between 16% and 30% of sales.

HUMAN FOOD PRODUCED BY FARM ANIMALS FROM 100 POUNDS OF DIGESTIBLE MATTER CONSUMED

Animal	Edible Solids Produced
Cow (milk)	18.0 pounds
Pig (dressed)	15.6 pounds
Calf (dressed)	8.1 pounds
Poultry (eggs)	5.1 pounds
Poultry (dressed)	4.2 pounds
Lamb (dressed)	3.2 pounds
Steer (dressed)	2.8 pounds
Sheep (dressed)	2.6 pounds

In a number of instances, I have referred in this report to the part played by the cost of doing business in the selling price of various items entering into this factor and the variation in the prices of the different items tell an interesting story. The following table, (page 528) gives the figures for twelve of the thirty merchants from whom information was collected.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Average for 30 merchants
Gross Sales	$48,750.00	64,727.68	9,600.00	18,559.60	15,022.31	6,240.00	3,812.95	4,554.71	19,946.99	49,340.44	14,000.00	25,714.94	
Rent	.47	.83	2.50	2.70	1.00	2.88	5.50	3.95	1.50	1.20	2.78	1.20	2.25
Salaries	4.01	1.21	20.50	6.40	3.72	22.41	7.87	13.17	10.29	10.60	9.64	8.88	10.15
Advertising	.23	1.81	.....	.97	.....	.40	.....	.....	.02	.26	.....	.24	.20
Heat—Light	.09	.06	.30	.65	.24	1.79	1.10	.13	.08	1.20	.43	.24	.79
Delivery	.94	.03	1.30	.....	.70	3.54	.....	.11	2.07	2.39	4.29	2.02	1.53
Supplies	.03	.10	.10	.10	.....	1.42	.26	.45	.08	1.00	1.43	.88	.45
Insurance—Taxes	.36	.16	.37	.27	.36	.58	.88	1.10	.31	.27	.19	.15	.49
General Expense	.28	.98	4.03	1.10	.60	1.28	.90	.22	.61	1.16	1.28	.14	1.06
Depreciation Shrinkage	.47	.19	.90	.20	.02	.80	.65	.....	.38	.40	.....	1.11	.68
Bad Debts	.05	.03	2.00	.....	.....	.80	4.11	.45	1.25	.50	1.07	.85	.65
Total	8.44	7.24	32.00	12.39	6.82	35.90	21.27	19.58	16.54	18.98	21.11	15.74	18.25

In general the cost of doing business was considerably higher for the stores doing a small business than for those doing a large amount.

Salaries were found, of course, to be the chief item in the cost of doing business. They ranged from 1.21% (in a store whose cost amounted to 7.24%), to 22.41% (in a store whose cost totaled 35.9%), and averaged 10.15%. Rents ranged from .47% (total cost 8.44%) to 6.15% (total cost 32.61%), and averaged 2.25%. Advertising ranged from nothing to 1.81%, total cost 7.24%), the average being .2%. It does not appear from this survey that advertising added materially to the cost of doing business; in fact, by the creation of sales which would bring about a more rapid turn-over, with no increase in fixed charges, it would seem, in some cases at least, that it actually decreased the cost.

Bad debts ranged from nothing to 4.11%, the average for the 30 stores being .65%. In every case where a store was doing business at a cost of less than 10% this item of "bad debts" was at a minimum—in fact in no instance was it higher than a half of one per cent; certainly this would appear to be a strong argument for those who wish to economize to do business on a cash basis.

The investigation brought out with startling clearness one fact, which every banker probably knows:—there are entirely too many men operating small stores in the state (particularly grocery stores), where bad business methods are being used. As an example, in conducting the investigation, many of these men did not know what it was costing them to do business, nor even what per cent of their receipts were being absorbed by the various items which make up that total. Some of those who were actually losing money were not aware of the fact until the investigation pointed it out; by failing to charge a salary for their own labor their accounts were showing an apparent profit, which disappeared rapidly when a fair sum for their own labor was charged against the books. It appears to me that here is an opportunity for a big work to be done by the Retail Grocers' Association, in the establishing of a usable system of accounting for the small grocer. Inefficient business methods are costly not only to the merchant himself but to the consuming public as well.

In commencing this report I stated that turn-over would be considered as a factor separate from the cost of doing business. I made the statement chiefly in order to dispel the popular illusion that a merchant who advertised extensively or did a large volume of business must necessarily charge more for his products than a merchant who did not advertise or who did business on a small scale. As a matter of fact, no set rule can be established. Even in our modern business, the personal equation plays too important a part to do so. Many small merchants, with or without advertising, possess business ability which enable them to sell cheaply but profitably. On the other hand, of course, it is only logical to expect a merchant doing a large business to be able to sell cheaper than the one doing a small volume of business. It would be more exact to say that his cost per unit should be less and that he should, therefore, be able to exact a smaller percentage of profit per unit. In using the term "larger volume of business," I refer not particularly to the size of the store, but rather to the volume of business per capital invested—in other words, to the amount of turn-over.

The following chart illustrating some of the possibilities of turn-over, will perhaps make this more clear.

CHART ILLUSTRATING SOME OF THE POSSIBILITIES OF TURNOVER

	1 TURNOVER		2 TURNOVERS		8 TURNOVERS		20 TURNOVERS	
	Total	Per Unit	Total	Per Unit	Total	Per Unit	Total	Per Unit
Cost of goods sold	$ 6,500	$ .65	$ 13,000	$ .65	$ 52,000	$ .65	130,000	$ .65
Overhead expense	1,000	.10	1,000	.05	1,000	1.25	2,000	1.00
Direct expense	1,500	.15	1,500	.09	4,700	5,875	10,700	5.35
Net profit	1,000	.10	3,200	.16	6,300	7.875	7,300	3.65
Net sales	10,000	1.00	19,000	.95	64,000	80.	150,000	75.00

PERCENTAGES	Total Expense		Total Expense		Total Expense		Total Expense	
Overhead	10	.25	5.26	14.73	1.56	8.90%	1.33	8.46%
Direct expense	15		9.47		7.34		7.13	
Net profit	10		16.84		9.85		4.87	
Mark-up	35		31.57		18.75		13.33	

I have only one purpose in quoting these figures, i. e., to show that the consumer may buy at almost any price he wishes and that the general public would complain less if it studied price lists more closely and was less inclined to make a "bluff."

From the foregoing it will not be difficult to see where I place most of the responsibility for the present high prices and for this reason it is easy to see that I am none too sanguine of any permanent beneficial effects being brought about through legislation. Prices will be lowered only by (1) reducing consumption, (2) increasing production and (3) reducing the quantity of money in circulation, and any legislation not affecting one or more of these remedies will be wasted. Perhaps it might be well to qualify this statement by saying that legislation intended to bring about a more equitable distribution, especially of food products, through the establishment of a State Market Bureau, would undoubtedly prove of great benefit to all concerned.

It is not my purpose at this time to outline any definite working plan for such a bureau. I wish merely to point out the fact that, even with our modern facilities for rapid transportation and the rapid dissemination of news, surprising inequalities of distribution exist and shortages of certain commodities in one place and over-abundance in others are found to be frequent. Obviously, if some agency such as a State Marketing Bureau was created to eliminate this condition, all would be benefited. I believe that the establishment of this Bureau would be of material assistance in curbing high prices.

More than any other factor in lowering price, however, will be the action of the consumer himself. In entering a store where he believes the prices to be exorbitant, if instead of paying the price demanded, he would state firmly, "I won't pay it" and seek another and perhaps less pretentious establishment, he would be benefiting not only himself but everyone else. If the housewife, instead of demanding elaborate service and instead of telephoning her food orders, would go to the stores and do her buying carefully, she would be less inclined to wail about the high living cost. If she will make some effort to discover what prices are being charged at various stores and will show a willingness to substitute cheaper but equally nutritious meats for the more expensive cuts, inexpensive, high nutritive ratio groceries for expensive delicacies, and simple goods of lasting quality for elaborate, modish gowns, etc., she will have taken a big step toward the reduction of the high cost of living insofar as it applies to her. Credit wisely used is a valuable business medium, but it is a weakness of human nature to buy more extravagantly on a credit basis than when it is the habit to deposit actual money; in other words, buying on a cash basis will assist materially in curbing reckless buying.

As stated, I am not at all confident of any permanent benefits being affected through legislation which does not seek to bring about one or more of the economic remedies outlined above, but at the same time, I do believe that some beneficial results may be obtained through the establishment of a Fair Price Committee. A measure of this kind will not, of course, check reckless buying, but it will at least have a tendency to prevent the merchants taking advantage of this present day extravagance.

Such a committee might be composed of the following: one member of the Dairy and Food Commission, one member of the Attorney General's staff, neither of whom shall receive compensation, and three qualified disinterested representatives of the public, who shall receive a stated remuneration per diem and whatever expenses may be incurred, for their services.

Obviously, the question of what would constitute a fair price for a given commodity would be largely a question affecting not only that commodity, but the conditions confronting the individual merchant as well, and for this reason an enormous amount of time and labor would be involved in attempting to set prices which would be fair to both the buyer and seller. In fact, it would be impossible for a single committee, constituted in the manner outlined, to do their work, even though the members of this committee devoted their entire time to it. It is for this reason that I advocate a Fair Price Committee, the distinction being that instead of attempting to fix prices, the Committee should act as a board sitting in judgment on the prices set by the merchants themselves. In other words, it would be a board whose function it would be to hear complaints of unfairness and take all the facts involved in the case into consideration before rendering a decision. Roughly, its procedure would be as follows: Upon receipt of a complaint of unfair prices, an inspector of this department would be detailed to inquire into the merits of the case. The inspector would have no power to render decisions nor to order the merchant to make a price revision; he would simply report to the Fair Price Board whether or not, in his estimation, the complaint was justified and submit the facts as he saw them. In this way, many unfounded complaints would be eliminated and only those which appear to have merit be brought to the attention of the board. Since there is little doubt but that many groundless complaints will be made, it is obvious that some method must be adopted which will enable the board to eliminate those which have no merit, otherwise, the board will be buried under a mass of complaints of every kind and description—a condition which would render such a board impractical, if, indeed, it could function at all. Since the inspector would be given no power to render decisions but would simply be called upon to state what complaints were in, his judgment, unfounded, it appears to me that there would be no grave danger that the intention for which the board was created would be frustrated by any abuse of power. Provision could be made to eliminate the entering in of the personal equation as far as the inspector was concerned if it is deemed wise.

Where the inspector found a complaint which he believed worthy of investigation, he could report that fact, with all the data which he had secured, to the board. By meeting at definite intervals these complaints could be taken up by the board, and a decision rendered. Needless to say, the appointment of a Fair Price Committee, would be useless if legislation was not enacted, giving it power to enforce its rulings. With such legislation, however, the board could not only determine what a fair price would be, in taking up complaints, but it could also set that price definitely upon the commodity in question and perhaps even force the seller to make reparation for any overcharges.

I will not at this time make any lengthy explanation for my suggestions as to the personnel of this board as I believe the reasons must be apparent. Suffice it to say, I feel that this department is in a position to be fairly well informed regarding commodities entering into ordinary commerce and for this reason should be represented. Since legal questions are almost certain to vex the board constantly, it will be wise perhaps to have someone familiar with State and Federal laws also serving on the board. The advisability of having a producing, buying, and selling public represented is obvious.

I am keenly aware that the proposal to establish a board of this kind may meet with considerable opposition on the part of the merchants of the state. Nor am I less aware of the difficulties which will confront such a board in its attempt to function intelligently.

Regarding the first objection, I believe that merchants will take a sensible view of the matter and not only cease to oppose the establishing of a Fair Price Committee, but will even advocate it when their attention is called to the fact that legislators are constantly receiving complaints (many of them without foundation) of high living costs and pleas for the enactment of legislation which "will put a stop to profiteering," and that unless some such measure as here advocated is adopted, they may face a large amount of radical legislation. I believe further, that the appointment of men whose honesty, intelligence and ability are unquestioned, will give any honest merchant little cause to fear, for men of this type will recognize every seller's right to a fair profit, as well as every buyer's right to be protected.

While not entirely relevant, I would like, at this time, to call attention to the glowing opportunity offered to debtors by the present abundance of cheap money. Perhaps, never in the history of our country was a man burdened with long-time debts able to pay these debts so easily as at the present time. For example, a man who had contracted a debt of $1,000, ten years ago can now repay that debt with a dollar whose purchasing power is about 50 cents. If, in some way, the wage earner could be induced to spend these "fifty cent dollars" in payment of his debts instead of for the indulgence of extravagant whims, he would be in a far better position to face any reverses which the future might bring to him.

BUTTER OR OLEOMARGARINE

Aside from their vastly different nutritive values, butter and oleomargarine have to Iowans an economic significance not generally appreciated.

During the last ten years Iowa has produced an average of 93,326,820 lbs., of creamery butter of which about 15% was consumed in the state and 85% shipped to eastern markets. These figures are exclusive of the farm dairy butter almost all of which is consumed locally.

Butter is an Iowa product. The raw material, butterfat, is a continuous cash "crop" from nearly every Iowa farm. Butter is made by Iowa labor, in Iowa factories which are made of Iowa building-materials and equipped with Iowa owned and Iowa made machinery operated by Iowa coal. Most of the manufacturer's profits remains in Iowa where it is spent with Iowa merchants.

Last year there was made in Iowa 90,915,938 lbs. of creamery butter which the creameries sold for $43,969,285. Eighty-eight and one-half per cent or $38,912,817 was paid to Iowa farmers for the cream and milk containing the butter-fat; 9.3% or $4,059,143 was spent by the creameries for Iowa labor and power, and most of the remaining $987,325 was distributed among Iowa farmers in the form of dividends from their creameries.

Oleomargarine is not an Iowa product nor does Iowa business derive any benefit from its manufacture. Some hog and beef fat is used as a raw material but by far the larger part of the raw material is either cottonseed oil, from the southern states or cocoanut oil from the Islands of the Pacific. Most of the oleo reaching Iowa is made in factories located in Illinois, Ohio and Missouri. The stock in these factories is owned there, labor employed there and the laborer's salary and the stockholder's dividends spent there.

WORK OF THE IOWA STATE DAIRY ASSOCIATION

By E. S. Estel, State Dairy Expert

The work of the Iowa State Dairy Association during the past year has been largely devoted to the organization of Dairy Calf Clubs. This movement has proven popular with many communities because it furnished a quick, efficient, and economical means of establishing better dairy herds. Although the unprofitableness of the low-producing cows and the increased value of the high producer has been urged upon the farmers of the state at many meetings conducted by the Association the realization of these facts was not forcefully brought to the attention of the producers until the extreme shortage of labor and the high cost of feeding during the past two years. These conditions have caused many dairymen to investigate the profitableness of their cows and have resulted in an increased sale of the unprofitable members of the herd. In order to replace as many of the animals sold in this way with dairy cattle of greater producing capacity, high grade and pure bred Dairy Calf Clubs have been organized.

A detailed description of the manner in which these clubs are organized is given in the attached Iowa State Dairy Association Bulletin No. 7.

Since the first clubs were organized by the Association in 1917 many changes and improvements have been made to the rules governing the club members. The first clubs were somewhat of an experiment and were not organized in such a manner that as close follow-up work could be conducted as is possible with the clubs organized during the past year. The grade heifers purchased for the clubs in 1917 ranged in age from 6 to 8 months and their cost was approximately $48 per head. The heifers were largely purchased in Wisconsin and in the shows which have been held since that time the results in growth and development are very satisfactory. It was found, however, that heifers of this age were rather difficult to purchase in large numbers and that the boys and girls who owned them did not become attached to them as much as they would to younger calves which require more attention.

Due to these conditions the grade calves purchased during 1918 and 1919 have been from 3 to 6 weeks of age. They have been shipped in individual crates by express and, barring a few accidents, have been delivered to members in good condition. We have been fortunate in getting calves from high grade cows and pure bred sires. They have come from the dairy sections of Wisconsin and are good straight growthy calves. The Association, since the spring of 1917, has placed 1,312 high grade heifer calves through calf club organizations. Through this movement dairy herds have been started on more than 700 farms where dairy cattle were not kept before. Realizing that it is best for a community to develop one breed of dairy cattle, most of the clubs have been organized to include one breed only. No partiality has been shown any breed and every community has chosen by vote the breed they should get. In a number of instances mixed clubs have been organized where there was a desire to have more than one breed.

The grade clubs that have been organized thus far are as follows:

Organized by	Location	No. of Calves
1917		
Farmers Savings Bank	Barnes City	40
Central Savings Bank	What Cheer	42
First Savings Bank	Sutherland	61
Brighton State Bank	Brighton	45
Leavitt & Johnson Bank	Waterloo	189
First National Bank	New Sharon	28
Iowa Savings Bank	Wellman	65
1918		
Farmers Co-operative Creamery	Britt	32
National Bank of Decorah	Decorah	169
Farmers Co-operative Creamery	Exira	34
Merchants National Bank	Grinnell	25
First National Bank	Iowa City	52
Farmers Co-operative Creamery	Klemme	38
Farmers Co-operative Creamery	Leland	46
All Banks Co-operating	Milford	64
Riceville Creamery Co.	Riceville	20
Saratoga Co-operative Creamery	Cresco	32
Supt. of Schools	Strawberry Pt.	22
Farmers Co-operative Creamery	Victor	10
Bank of Woden	Woden	28
Farmers Co-operative Creamery	Clear Lake	12
1919		
Earlville Creamery Co.	Earlville	39
Perry Packing Co.	Perry	43
Farmers Co-operative Creamery	Templeton	13
Farmers Co-operative Creamery	Britt	17
Farmers Co-operative Creamery	Guthrie Center	61
Farmers Co-operative Creamery	West Bend	26
Farmers Co-operative Creamery	Worthington	27
Farmers Co-operative Creamery	Volga City	10
Gladbrook Creamery Co.	Gladbrook	16
Wadena Creamery Co.	Wadena	6

PURE BRED CLUBS

The demand for pure bred cattle in some of the older dairy sections of the state led to the organization of a number of pure bred dairy heifer clubs this spring and summer. The manner of organizing these clubs is also explained in Bulletin No. 7 which is attached. Due to the increased amount of work required to organize such clubs the number of grade dairy calves introduced this year was not as large as during 1918. It is thought, however, that the added results of the pure bred club will more than offset the decrease in the number of grade calves brought into the state. Information regarding the pure bred clubs is given in the following table:

Organized by	Location	No. of Calves
Fayette County Farm Bureau	Maynard	17
Buchanan County Farm Bureau	Jesup	32
Buchanan County Farm Bureau	Independence	17
Bremer County Farm Bureau	Waverly	24

The heifers supplied to the Fayette Club were all pure bred Holsteins purchased in Iowa. These were placed in the hands of the members at $150 per head and were from 8 to 12 months of age.

Pure bred Jersey heifers, approximately 12 months of age, were supplied to the Jesup Club. These were all purchased in the northern part of Missouri and cost the members $168. The Independence Club is composed of pure bred Holsteins 8 to 12 months of age which were purchased in Wisconsin and which cost $150 per head to the members. Bred Holstein heifers from 18 to 26 months were supplied to the Waverly Club. These were also purchased in Wisconsin and cost the members $270 per head.

The work as outlined requires the members of the clubs to make regular reports to the Association office. Report books similar to the attached are furnished each member for his or her own record. Bimonthly reports are required to be sent to the Association by each member.

OTHER WORK

Due to the shortage of funds available for traveling expenses it was necessary for the organization conducting the meetings to pay the expenses of representatives of the Association at such gatherings. This tended to greatly reduce the number of meetings held and did not enable the represntatives to get into the communities where work of this nature was most needed. However, from November 1st, 1918 to the present date 103 meetings were attended. These were creamery meetings, farmers' institutes, and farm tour meetings. During the past summer and fall many of the calf clubs which were organized a year ago held their calf shows which proved an excellent means of arousing a greater interest in dairying in the community.

Community Dairy Shows have been conducted in connection with most of the Association meetings.

During the spring and fall months when the work is urgent on the farm and it is therefore difficult to hold meetings, bulletins are sent to the local newspapers. These contain timely suggestions which assist the farmers in solving the problems which confront him with reference to his dairy herd. They are written with the idea of assisting the creameries in improving the quality and quantity of raw product. The newspapers are lending their assistance by giving the information a prominent place in their columns.

A service department to assist the man just entering the dairy business to locate and purchase foundation animals for his herd was also conducted. The object of this department is to bring the man who has dairy cattle for sale in contact with the man who wishes to buy. A large number of farmers have taken advantage of this service and many of them have been enabled to purchase the animals they desired at a much smaller expense than if they had attempted to locate stock themselves. It has been a means of encouraging the purchase of pure bred dairy sires to head herds of ordinary type in many section of the state.

The Dairy Cattle Congress which was originally started by the Association and still actively assisted by it has developed into one of the two great national dairy expositions of the country. The 1919 show held Sept. 22-28 was a greater success than any of its predecessors.

This show is an important part of the dairy development work of the state for it brings dairy cattle breeders with their choice herds from every part of the United States and offers farmers of not only Iowa, but the Mississippi Valley as well, an opportunity to become acquainted with the various breeds. It has also enabled many dairymen of Iowa to purchase foundation pure bred stock for future herds at a minimum expense.

Premiums are offered for dairy cattle, butter, cheese and milk which together with the display of dairy appliances and farm implements attracts thousands of farmers and dairymen. The Iowa State Dairy Association holds an annual meeting in connection with the show. Other dairy organizations of the state also affiliate in holding their conventions, annual meetings, etc.

The Dairy Cattle Congress is incorporated under the laws of Iowa and is financed entirely by sale of stock. It is self-supporting and each years sees it growing in its importance as a dairy show.

CREAMERIES IN THE EARLY DAYS

By M. J. Cort

It was in the year 1876 when I first began to see the necessity of doing something in the creamery and butter business. I had heard of Iowa's first creamery at or near Manchester, which was put in operation in 1872. At that time I was in business in Zwingle, 14 miles south of Dubuque. We were taking in lots of butter in trade for merchandise, which, when mixed together, caused it to contain a variety of colors. We bought a hand butter worker and paid $5.00 for a recipe which taught us how to re-work butter ready for the market. We handled our butter in this manner for a couple of years. In the spring of 1879, the Iowa Dairy School was started, and from it we got what information we could regarding the Dairy Business. At this time we were paying 8 cents a pound for our butter.

I never will forget the day I took seven tubs to Dubuque and Mr. Walker, a commission man, who said, "Cort, all that I can pay you for that butter will be 4 cents a pound -no commission." I gave him four tubs and shipped the other three to a firm in New York City.

We had read of various individual creameries over the country. N. S. Andrews had sold his plant at Baldwin, west of Maquoketa. I drove down and made him a proposition to build a creamery at Zwingle, and agreed to furnish him the power from our steam mill for $100 a year. He accepted and came up and started the creamery in the year 1879.

Our people never received less than 12 to 15 cents thereafter. Creameries began to spring up all over the state, mostly individual plants. There was no way of testing cream at that time, but Andrew's tester was later invented. It was composed of a common 14 quart, 20 cent, wooden pail, which contained some 6 inch bottles. He succeeded in selling 15 of these testers for $100.00 each. Later he invented the Conqueror Test churn, and then moved to Dubuque and began manufacturing it. In three years he cleaned up $25,000, and in 1887 I quit the store business and commenced working for him.

At that time Iowa had 449 creameries and 52 cheese factories still mostly individual or stock company plants. Then it was that testers of all kinds began to come into use. We had the Conqueror, the Short Method, the Bennling, Centrifugal, Prof. Patrick's, the Cochrass, and the Babcock, while the various acid and casein tests were also being used. About three months after the Babcock tester was put on the market, creameries all over the country voted to use it. In fact, the whole world began using it along about 1891. Mr. Babcock donated it to the world free to use and the co-operative movement began in earnest.

I sold, equipped and put the machinery in running order at Colesburg, Iowa—my first sale. I helped organize creameries at Baletown, Luxenberg, Sherrels Mound, Dyersville, Holly Cross, New Vienna, Epworth, Cascade, Temple Hill, Petersburg, Worthington and other points. Then it was that I helped the Hamy & Campbell Co., equip their plant near Beach's soap factory, and we began in earnest. Then it was that the Danish Western and De Laval, came into use, and in a short time thereafter the Sharples. I went to Tripoli, Iowa, to see the first De Laval which was brought to this country by Mr. Jeppe Slifsgaard in 1882. It was held at the Customs House in New York for two months, because the Revenue Officer could not decide if it was made out of steel or cast iron. They finally decided that it was steel and made him pay $93.00 for revenue.

The first De Laval separator was used in 1883, and the first Danish Western separator in 1884 by Mr. Marsh, of Waterloo. The first factory separator was introduced in general about 1889 or 1890. In 1893 I sold the first Disbrow combined churn and butter worker which was sold in Iowa. For a starter, we sold Bacillus 41 which we called B. 41.

As I said, the co-operative movement had made a good start for in 1896 Iowa had 725 creameries and 71 cheese factories while Minnesota had 445 creameries, 62 skimming stations, and 69 cheese factories.

In 1890, the festive animal known as the Creamery Promoter, crossed the border, as one of my friends said, and invaded the territory. Mr. W. B. Barney, Iowa Dairy and Food Commissioner, gave the best definition of a promoter I have ever heard. He said, "a promoter is a man who sells something he has not got, to people who pay for something they never get." I claim and always will claim, that the Creamery Promoter and the Skimming Station were the causes of the set-back in the dairy business in Iowa, Kansas, Nebraska, Minnesota, North and South Dakota and, in fact, every dairy state. The promoter got his wish in Kansas and Nebraska, when the dairy business was just beginning, and as a result those states have never gotten down to what we call co-operative work since. These same promoters also started in Minnesota and in North and South Dakota.

I have stated that the Promoter and the Skimming Station was a set-back for the creamery business. The only real promoters we ever had was a Chicago firm. This firm could not get the agency for any separator, viz., the Danish Western, De Laval or Sharples, but the Alexander had been invented in the old country, and this company bought the exclusive right to manufacture it in the United States. They called it the "Alexander Jumbo," and it was a jumbo.

The company would send one of their promoters out (at that time they had 15, with offices in Chicago), and this promoter would get the farmer to subscribe from $5,000 to $6,000, each man subscribing $100 or more. His contract called for building and complete creamery outfit, the farmer furnishing the site. When the necessary amount was subscribed, the agent would send his contract to his company.

Next came the builders. When the building was completed, another man would arrive with the machinery. He would place it and when completed, he would do as the builder did, viz., pay his hired help by giving them vouchers which were also given to the lumbermen and masons, all to be paid by the collector. Then he would have the officers examine the building, machinery, etc., and if found according to contract, they would sign the acceptance which read, "We have this day examined the machinery and building and find everything according to the contract and have accepted the keys." This acceptance would be sent to the house at Chicago, then it was placed in an envelope with the contract and sent to the collector who would collect the money, pay off the vouchers and make complete settlement.

They had a system. They blew the whistles of an average of three plants a day in the year 1892 and did a business of over two and one-half million dollars that year.

I have always explained very frankly the methods of the promoter and the detriment they were to the country, while working in the early days and up to the present time. When I helped to organize a creamery, I did not mention machinery until money was subscribed and organization was completed. I never was bothered with competition until it was found out that I had completed organizing a creamery when the promoters would call and try to show how much could have been saved if they had been given a chance to make a bid. At this time machinery concerns of all kinds sprang up until there were so many of them that for half a dozen years up to 1897 (and even later) the machinery was sold for less than cost, causing some of the firms to fail.

Creamery machinery at that time consisted of a receiving vat, milk heater, separator, cream vat, box churn and tester, also a Mason Worker, and a skimmed milk scale. Before we used the separator we used the Fairlamb can, until a machine called the Butter Extractor came into existence about 1891. This extractor was a separator and a churn combined and had the speed of a separator. In the 4 or 5 inch opening at the top there was placed what is called an inverted squill wheel which was drawn close enough to come in contact with the cream as it was driven up and would churn it into butter before it was allowed to flow out as in a separator. The butter would fall to the bottom of the bowl and go out through a hole in the bottom of the bowl into a tub which contained ice to "preserve" it. It was found however, that the animal heat interfered with the keeping quality of the butter and caused makers to cease using the method after more than half a million dollars had been spent upon it.

A few years after, about 1896, or 1897, the hand separator made its appearance and we heard something about pasteurization. I sold and put in operation the first pasteurizer, in Minnesota, in the spring of 1897. It was the famous Hill's Pasteurizer. I believe that when the hand separator was introduced and was being used that it put a damper for some time in the organization of a lot of fine co-operative creamery associations, because at that time a creamery could be built and equipped for from $2,500 to $3,000. With the hand separator system, they could save from $450 to $700 in building and equipment but if there were 100 patrons, each one would have to purchase a hand separator for $100 each, which would amount to $10,000. Thus it can be seen that their creamery would cost them $12,500 or more, and in a newly-settled country, the people could not raise the money to start such a concern but were compelled to ship their cream. I am sure that if the farmers in general all over the country knew how much butterfat, worth from 60 to 75 cents a pound, they are feeding to their pigs and calves, they would be tempted to return to the factory separators again. I have made this test and know what I am talking about.

I remember that at one of my meetings an old gentleman asked, "which should we do, put a large separator in our factory or each one of us buy a hand separator?" I was stuck. I told him that in a few days I could tell, or on my next trip over the territory. I took 40 half pint jars and some corrosive sublimate tablets with me, made some fast drives early in the morning and in the evenings, caught the farmers operating their hand separators, took samples of their skimmed milk, sent the samples in by express and had the professor of the Experimental Station test them. It was found that the farmers, regardless of the kind of separators, were losing from two tenths to one and a half pounds of butterfat in the skimmed milk. One man's machine left two pounds of fat in the milk, while the 39 samples tested, showed an average of a little over three-fourths pounds butterfat in every 100 pounds of milk extracted by the 39 machines. When I met the gentleman again, I was able to tell him the difference. Just before this I had sold a large machine and in the contract had guaranteed it to show not over .03 of 1% fat in the skimmed milk, and I knew it must have done as guaranteed because I never heard from the people afterwards.

From about 1891 to 1896 competition in factory separators taught us a great lesson. The tester gave us a chance to show what a machine was doing, so much so in fact that we frequently had our separators located in a factory beside competitors' separators, neither one paid for, but guaranteed to do good work in skimming. They had to be tried out in order to convince the company which was the best. The only way to settle it was for each salesman to be present, three judges appointed, an expert from the factory where the machines were made and an expert, superintendent, or some other fellow from the house, all ready. Each separator would have to separate equal quantities of milk and the one which did the closest skimming won. But how did they win? In contests, like in war, everything was considered fair. In consequence, every advantage was taken to win. One might dilute the acid and one might buy off the judges. I have seen them drag their fingers through the cream and rinse them off in the other fellow's sample. In fact there was so much rottenness done in contests that they became a thing of the past. I have even seen the experts sleep beside their separators so that his competitors would not get a chance to sand his bearings. Oh, yes, everything is fair in war, but I am glad to say that education changed all such actions. The leading idea of manufacturers now is to improve their machines, and attempt to show up their machines in the proper manner.

Another thing which caused a lot of our creameries to close and kept others from being organized, was the shipping of cream by the farmers themselves. Had the various traveling men and solicitors explained the churn over-run, and showed the loss resulting from shipping cream, the creamery business would have been benefited. The people were also told by some of our men in authority that in order to start a creamery, they had to have at least 500 cows. Had this advice been listened to, there never would have been a single creamery company organized.

After the various agricultural colleges were started we began to study and learn how to explain the proper methods of feeding. All we did before we found this out, was to feed regardless of the kind of animal or the quantity necessary to accomplish any good. We did not know how necessary it was to get rid of the "star boarders." Not one man in a thousand ever kept any account of what he sold or what he fed, and I am sorry to say that I believe not one out of a hundred of our farmers today, really know what they are doing. Most of them simply sow and reap, feed and sell feed, and never balance their accounts at the end of the year to see if they are making any profit. As a result they are compelled to go to their banks and borrow enough to tide them over until the next year, never knowing what caused the losses which made them borrow.

FEEDING DAIRY CATTLE FOR GREATEST MILK PRODUCTION

By Prof. C. L. Blackman

Dairy Husbandry Department, Iowa State College

At this time as never before conditions demand that every individual shall produce a maximum to compensate for the great losses sustained in war and what is true now is more or less true at all times. The dairyman then who is feeding and breeding cattle should see to it that the individual cows in his herd are producing a maximum of product at a minimum of cost.

This result can only be attained by good breeding practices, careful thoughtful feeding and intelligent selection based on reliable records. All of these items should be well considered and any one of them left out weakens the rest of the work done.

Good feeding may be considered equal to either of the other two phases of Dairy Herd Management in realizing the greatest production and profit from the individual cow.

The feeding of dairy cattle, while reputed by some to be a great secret known to but few, is in reality merely one of those farm problems which can be readily solved by giving the matter some serious and thoughtful consideration. A great amount of technical knowledge is not necessary, but merely an understanding of wants of the cattle and the feeds which may supply these demands.

A brief discussion of the form of the digestive apparatus may serve to explain why a ration to be most efficient should have certain characteristics.

The cow is a ruminant and is preeminently a user of rough feeds such as grasses, hays, and silage, and for that reason is equipped with a very capacious digestive apparatus different from other types chiefly in that it contains three stomachs, besides the regular digestive stomach common to other animals not ruminants.

The first stomach of the cow is chiefly a storage place where food, which has been but little masticated, is stored. The second stomach readily communicates with the first and acts as a catch basin for foreign materials. When a cow eats roughages she swallows her food rapidly after little chewing. When at rest she returns this food to her mouth about four ounces at a time and rechews this food completely and then swallows it again and this time the food goes to the third stomach, or (manifold), where the water is partly pressed out and the food then passes on to the last stomach where it meets with the digestive juices of the stomach.

A dairy cow produces most economically when she is fed up to her normal capacity. For that reason it is essential to have the cow eat as much as possible. In order that she do this it is necessary to supply at all times a ration that is palatable and one the cow is always anxious to receive. To insure palatability care should be taken to select leguminous roughages as far as possible and those which contain all the leaves. In selecting grain, care should be taken to get good clean grains free from mouldy and rancid conditions, also care should be taken in mixing the more palatable with the less palatable feeds. For example, gluten is not palatable to most cows, but it is valuable feed and may be well used in some rations to secure a proper balance of nutrients.

It would be of little avail to a cow if she should consume large amounts of feed that were low in digestibility as this would overtax her system. Thus it is very necessary to select roughages that are highly digestible. However, in roughages it often occurs that the palatable feeds are the digestible ones although this need not necessarily be true. Hays that have been cut too late are often so "woody" that it requires too much energy to digest them. This is generally true of straws and dried stovers. The digestibility of grains purchased in the market can generally be determined in a relative way by their (fiber) content which usually comes from the hull or outer parts. In selecting grains it is usually more economical to feed those low in fiber even though they are more expensive. This is especially true in feeding different grades of the same product. "The Best is often the Cheapest." The dairy cow more than any other class of livestock on the farm works through the entire year and for a long period of years and for that reason it is highly important that some consideration be given the ration from the standpoint of effect on the digestive tract. An effort should be made as far as possible to supply some feeds which have a cooling effect on the system, such as silage and roots. Here in the Central West silage is the cheapest feed of this sort and all dairymen who are in a position to grow enough corn to fill a silo should have one which will supply the wants of their herd.

On farms where silage is not available oil meal should be a part of the grain ration, especially during the winter months as this has a soothing and laxative effect on the digestive apparatus. Oil meal may well be used where silage is fed, but if possible it should always be used where silage is not fed.

Previously it was stated that the cow utilizes large amounts of rough feed, besides this it has been found that a certain amount of bulk is absolutely necessary in the ration. It is said that a cow could starve to death with her first stomach one-third full of food, and this is true because it is necessary to have more than that in the stomach before the cow can ruminate. The matter of bulk has to be given consideration in the case of grains, especially, as the hays and silage are all bulky enough to be properly handled. In making up the grain ration, care should be taken to use as many pounds of bulky grains such as wheat bran, and ground oats as the heavier grains, such as corn meal, gluten and cotton seed meal. It has been found by experiment that corn and cob meal is equal pound for pound in feeding value with corn meal where the cob is the only source of bulk. This is not because the cob adds any appreciable amount of nutrients but because the bulk added makes it possible for the cow to more completely digest the nutrients present in the corn meal. Corn and cob meal may be made the basis of many of our dairy rations in this part of the country where so much corn is grown.

The dairy cow is fed for the purpose of supplying her wants in protein, carbohydrates, fat and ash, and as these nutrients perform special functions in the body it is necessary that they be supplied in the proper proportion. A brief explanation of the function of these nutrients may assist in demonstrating their importance.

Protein, which is one of the most valuable nutrients, is used for the purpose of building and repairing muscle tissue, bones, hide and hair as well as furnishing building material for the foetus and supplying protein to the milk. This is the only nutrient capable of performing this work.

Carbohydrates and fats supply heat and energy to the body and furnish materials for making body fat as well as that in the milk. Fat, however, is two and a quarter times more valuable as an energy furnisher than carbohydrates.

Ash supplies the mineral content to the bones and also supplies and maintains the mineral content of the blood stream and tissues and furnishes ash to the milk.

Generally, in referring to the balance of nutrients, we mean the relation between the amount of protein present and the amount of carbohydrate and fat, inasmuch as the ash pretty well looks out for itself due consideration is given to the other characteristics of the ration. Inasmuch as the carbohydrates and fat cannot perform the function of protein, it is necessary to supply enough of this nutrient to take care of the wants of the animal and a lack of this in the ration will limit the production although an abundance of other nutrients might be present. It is also important that too much protein shall not be present in the ration because, while an over-supply may be used to furnish energy, protein is no more valuable for this purpose than carbohydrates and is far more expensive, and besides this, too much protein overtaxes, unnecessarily, some of the essential organs of the body.

For several reasons it is desirable at all times to supply a ration which comes from several sources. In the first place the cow must always be kept eating and a ration taken from one source may become unpalatable to the cow if fed for a long time. But if several feeds for example are used in making up the grain portion of the ration one of these may be dropped out and another added and the ration made more palatable, and at the same time the cow will not feel the undesirable effect of a sudden change from one grain to another. Furthermore, it has been found that all the proteins are not alike in feeding value and that often two proteins are better than the same amount of one protein. Thus, for best results the feeds given a cow should originate with several different kinds of plants, for example, a ration made up of clover hay, corn silage, ground oats, cotton seed meal and corn and cob meal would insure complete nutrition if fed in proper amounts.

The last factor to be considered, and one which is equal to any in value, is that of economy of the ration. If all other characteristics were right and this one wrong, the ration would be a failure. Again, however, in this part of the world where hays and grains are grown in abundance, the problem is not a difficult one. In general it may be said that home grown feeds are the cheapest as they are free from freight charges and middlemen's profits. However, there are times when it is possible to haul whole grain to market and bring back factory by-products, such as wheat bran, and save money. Previous to the war this was especially true of oats.

In growing feeds for economical milk production it is always well to grow legume hays as far as possible. In case roughage has to be bought legumes again are usually the cheapest when considered from the standpoint of nutrients contained, and that is the basis on which all feeds should be bought whether they be roughages or concentrates.

FEEDING GUIDES

While it is impossible to state accurately what and how much feed should be fed to all cows at all times, some general suggestions may be of value.

1. Feed one pound of hay per day for each hundred pounds of live weight when silage is also a part of the ration.
2. When silage is not used feed two pounds of hay for each one hundred pounds of live weight.
3. In feeding silage give three pounds of silage per day for each one hundred pounds of live weight.
4. Feed one pound of grain for every two and one-half to four pounds of milk produced per day. Cows giving high testing milk should receive the larger proportion of grain.

In order to produce milk most economically it is very necessary to prepare the cow for her year's work by feeding her well during the dry period which should last from six weeks to two months. Too often it is the practice among farmers to slight their cows at this time because as they say, "They are producing nothing," However, it should be recalled that they are producing a calf and besides that they need extra feed to build up and prepare for a hard day's work. One of our best feeders has said that the feed he feeds during the dry period is the cheapest feed of all the year in that it gives greatest returns for the money expended.

Just before and immediately after freshening the cow should receive but little grain and that of the lighter types such as wheat bran, ground oats and perhaps a little oil meal. This should be gradually increased until the cow is receiving enough to insure a maximum milk flow and the cow may receive as high as one pound of grain for every two and one-half pounds of milk. Care should be taken at all times to so feed that the milk flow is maintained at a constant level as far as possible. For awhile in the spring and early summer, when the pasture is abundant, it is well to remove all grain from the ration, and thus give the digestive system an opportunity to rest a little. Later on in the season, when the pasture dries up, and the cows begin to decrease in milk flow, enough grain should be added to prevent too much decrease, so, as the milk decreases, the grain should be increased to maintain the flow at a constant level.

The dairyman should at all times keep some sort of a production record which he uses as a feeding guide. If this is done, sudden and permanent slumps in production will be prevented.

Increasing the economy of dairy production through liberal feeding of thoughtfully planned rations has often been demonstrated in the Cow Testing Associations as well as elsewhere. One of the most convincing pieces of evidence along this line was furnished this year by the herd records of one of the Pioneer Cow Testing Association members. The table below shows how each of the cows were fed these years and how much each produced.

FEED AND PRODUCTION RECORDS OF THE SAME COWS WHEN LIBERALLY FED & POORLY FED

SEE HOW IT PAYS TO FEED

			Record Lbs.		Grain Lbs.		Roughage			Total	
Name	Age	Year	Milk	Fat	protein Feeds	carbo Feeds	Straw	Hay	Silage	Feed Cost	Profit
Daisy	5	1917	6748	255.4	56	1730	310		11878	$ 85.83	$49.02
	6	1918	8173	341.0	956	2698		300	9491	146.19	80.17
Beauty	4	1917	5774	264.4	56	1730	310		11878	85.83	54.62
	5	1918	8220	360.3	1156	3929		300	11391	172.72	69.18
Jewell	5	1917	6984	307.2	56	1922	310		11878	89.09	72.11
	6	1918	8847	381.0	1096	3704		300	10341	164.36	89.79
Bess	5	1917	7360	280.9	56	1922	310		11878	89.09	57.79
	6	1918	8361	343.0	1096	3704		300	11391	164.36	64.98
Black	3	1917	6604	269.3	56	1578	310		11878	81.71	60.42
	4	1918	7876	322.1	816	2768		225	9933	137.05	67.10

While the rations fed the herd, the second year, were not ideal, yet the cows increased their production enormously because of the protein concentrate (oil meal in this case) which was added to balance the ration and because a generally more liberal ration was fed. Another interesting thing to note is that the cows were on pasture five months the second year while the first year they were on pasture seven months which is altogether too long a season to pasture in Iowa. A pasture record like the latter too often means that the cows were running in stalk fields long after they should be in a good warm barn.

There is an impression among too many dairymen that young stock should utilize all the poor rough feed (because they are not producing anything). This is an erroneous idea and a dairyman should put money into good feed for young stock just the same as he makes savings deposits or makes investments, knowing that some day he will get it all back with good interest.

This fact was clearly demonstrated by the records on the scrub cows and heifers brought to Iowa State College from Arkansas to be used in a breeding experiment. The following table shows clearly how the younger animals profited by the better feeding they received while growing. All of these cows were of the same breeding (scrubs) so the difference in production was due to the feed received during their development.

TABLE TAKEN FROM BULLETIN NO. 165 OF IOWA STATE COLLEGE

AVERAGE PRODUCTION OF SCRUB COWS BROUGHT IN FROM ARKANSAS

Group	No. of Lactations	Average Milk	Prod. Fat	Increase in	
				% Milk	Fat
Mature	15	3168.7	153.64		
4 year old	15	3597.7	166.36	14	8
Heifers	28	4036.1	191.21	27	24

It is interesting to note that heifers as nearly mature as four years olds were made into better cows for having received a liberal balanced ration at the end of their growing period. The remarkable increase in production of the young heifers over the mature cows brings back the fact that liberal feeding of young stock pays good dividends.

Many farmers believe that it is not necessary to feed a grain ration especially if there is corn in the silage, however, when it is considered how much product the cow actually makes the fallacy of this idea is readily seen. It no doubt would be possible for the "original unimproved cow" to feed on roughages alone, but when it is realized that the cow of today is an unnatural animal developed far beyond her normal producing ability it is readily seen why it is necessary to feed some grain in order to secure maximum production, which is the cheapest production.

Remember the properly bred and selected dairy cow is a machine which works most efficiently when fed to capacity with a carefully balanced ration.

CHANGES IN THE LAWS

If there are any periods, in particular, during which the public, and dealer as well, needs the protection given the efficient food laws and laws effectively regulating the traffic in other essential commodities, it is during periods of high prices and times of changes in economic conditions. Such conditions prevail, and from present indications will continue to exist for some time.

During the past two years, it was found that many provisions of the various laws enforced by this department were not as effective as desirable to meet the present and probable future conditions. Where conditions indicated, changes in the laws were suggested to the Thirty-eighth General Assembly, and with but one or two suggestions of minor importance, were favorably received and acted upon. While most of the changes were important there has been no change in any of the basic principles of these laws. Practically all new legislation consisted of measures designed to enlarge the scope and strengthen them.

Changes were made in the Food Law, Sanitary Law, Dairy Law, and Weights and Measures Law. These changes will be discussed in order. There was no change in any of the other laws enforced by this department. One new law, the Egg Law, was given to this department to enforce. While this may be considered as a part of the food law, it is for convenience treated separately. Except where otherwise noted all changes in the various laws are now in effect.

CHANGES IN FOOD LAW

An amendment to the food law gives this office authority to issue standards for foods where such standards are not fixed by statutes. Such standards as are adopted must conform with those issued by the Secretary of Agriculture of the United States and be approved by the Executive Council. The standards provided for by this amendment have been issued in the form of a rule and regulation and are printed as a section of this bulletin.

A second amendment requires that the name of any article of food sold in "package or wrapped form" be placed upon the package or wrapper. This provision applies to all packages entering commerce as such or put up by the manufacturer, packer or jobber for ordinary commercial use. It does not apply to small amounts sacked or wrapped by the retailer for the purpose of delivering small quantities to the consumer.

CHANGES IN THE SANITARY LAW

The duty of enforcing the sanitary law in so far as it affects hotel kitchens was transferred from this department to the office of hotel inspector. The hotel inspector enforces the hotel law relating to hotel rooms, toilets, wash-rooms, fire escapes, etc., and it was decided that, inasmuch as the hotel inspector called at the hotels for such inspection work, he could, at the same time, make the inspection of sanitary conditions affecting the preparation and serving of food.

CHANGES IN THE DAIRY LAW

The old sections of the dairy law defining milk, cream and skimmed milk and stating what constitutes adulteration and misbranding of them was stricken from the law and a new section, covering these subjects, enacted. There has been no change in the standards for these products, the new section being but a revision of the obsolete wording of the original section. In a new section the phraseology is modern and the meaning clear, making it possible to properly word informations to cover violations of any provision of the section.

A new section of the law, effective October 1, 1919, defines imitation evaporated milk and imitation ice cream and regulates the sale of such imitations. During the past few years several articles of food have appeared upon the market designed to take the place of evaporated milk. In general these are nothing more or less than evaporated skimmed milk to which some vegetable oil, usually cocoanut oil, has been added. These products were sold under coined names and extensively advertised, in many cases as evaporated milk. These imitations do not possess the food value or properties of evaporated milk, altho the advertising propaganda conducted by the manufacturers and salesmen led many consumers, and grocers as well to believe that they were.

The law now covering this class of products requires that they be labeled with the words "Imitation Evaporated Milk" in such a manner as to acquaint the dealer with the true nature of the product he is buying and the purchaser with what he is consuming.

A new section of the dairy law provides for the registration of state marks or brands to be placed on containers used for the purpose of shipping or delivering dairy products. The objects which it is hoped this provisions will accomplish are:

1. To prevent the misuse of containers.
2. To promote sanitary handling of containers and contents.
3. To clearly establish the ownership of containers.
4. To aid in assorting, billing and shipping containers and their contents.
5. To promote the more rapid movement of containers and their contents.

This section makes it an offense to misuse any container bearing a state brand or holding any branded container for more than three days without the consent of the owner of the container.

Of particular interest to the grocer is a new section prohibiting the use of "dairy-terms" on packages of oleomargarines and in advertising material advertising oleomargarines. This section is as follows:

No person, firm or corporation shall use in any way, in connection or association with the sale or exposure for sale or advertisement of any substance designed to be used as a substitute for butter, the word "butter," "creamery," or "dairy," except as required by Section twenty-five hundred seventeen (2517) of the Code, or the name or representation of any breed of dairy cattle, or any combination of such word or words and representation, or any other words or symbols or combination thereof commonly used in the sale of butter. (Sec. 6, Ch. 206, Acts of 38th G. A.) This section becomes effective August 1, 1919.

The Renovated Butter Act is a measure prescribing regulations under which that product shall be sold. These regulations, as well as the definition of renovated butter, are essentially the same as the federal regulations governing the shipment of renovated butter in inter-state commerce with the exception that the words "Renovated Butter" must be placed on the top and sides of each package in type three-fourths (¾) inch in height, and that a plainly legible card be placed upon renovated butter offered for sale in other than original packages.

The law relating to collection of statistics pertaining to the production and distribution of dairy products has been amended so as to increase the scope of this work.

CHANGES IN WEIGHTS & MEASURE LAW

The principal change in the weight and measure law consists in a revision of old section 3009-j. This has been divided into section 3009-j-1 to 3009-j-4 inclusive as follows:

Sec. 3009-j-1. Dry commodities sold by weight or measure.—All dry commodities, weighing ten ounces or more, except drugs, section comb honey and those specified in section nine, (Sec. 3009-i) shall be bought or sold only by standard weight or numerical count, lineal or surface measure, except where parties otherwise agree in writing.

Sec. 3009-j-2. Statement of weight required.—Bales of hay or straw.—Whenever any product is sold and the selling price is determined other than by the numerical count, lineal or surface measure, and the products do not have the net weight plainly pritten, stamped or printed thereon, the seller shall at the time of delivery, upon the request of the purchaser, furnish a plainly written or printed statement showing the name of the article sold, the quantity in net weight thereof, and the price paid for each item. No person, firm or corporation shall sell, offer or expose for sale any bales of hay or straw without first attaching thereto a plain and conspicuous statement of the minimum net weight contained in such bales. Provided that nothing in this act shall be construed to require a statement of weight on each bale where hay or straw is sold by the ton and a ticket showing the gross, tare and net weight accompanies the delivery.

Sec. 3009-j-3. False weight—Entry at false weight or measure—Rules and regulations.—That for the purpose of this act, any person, firm or corporation shall be deemed guilty of a misdemeanor and shall be punished by a fine of not less than five dollars ($5.00) nor more than one hundred dollars ($100.00), or by imprisonment in the county jail not exceeding thirty (30) days:

First. If any such person, firm or corporation sell, barter, trade, deliver, charge for or claim to have delivered to a purchaser an amount of any commodity which is less weight or measure than that which is asked for, agreed upon, claimed to have been delivered, or noted on the delivery ticket.

Second. If any such person, firm or corporation make settlement for or enter credit, based upon any false weight or measurement for any commodity purchased.

Third. If any such person, firm or corporation make settlement for or enter credit, based upon any false weight or measurement, for any labor where the price for producing or mining is determined by weight or measure.

Fourth. If any such person, firm or corporation record a false weight or measurement upon the weight ticket or book.

Provided, however, that reasonable variations shall be permitted, and tolerances and exemptions as to small packages shall be established by rules and regulations made by the State Dairy and Food Commissioner.

Sec. 3009-j-4. Bottomless measures.—The use of bottomless measures is hereby declared a violation of this act, unless they conform in shape to the United States standard measure.

The section relating to inspectors checking weights of loads of commodities being delivered has been amended and the law now gives inspectors of this department the authority to "stop any wagon, auto truck, or vehicle loaded with ice, coal, hay, grain, cattle, hogs, vegetables, junk or any other commodity being bought or offered for sale or sold, and order the same reweighed for the purpose of obtaining the correct weight thereof.

LAWS ENFORCED BY DAIRY AND FOOD COMMISSIONER

DAIRY LAW

The objective of the dairy law is to insure the manufacture of clean wholesome dairy products of uniform quality and possessing high nutritive value, and to encourage and promote all branches of the dairy industry, thereby securing for Iowa farmers a steady and fair market for one of Iowa's most valuable agricultural products.

FUNCTIONS OF ASSISTANT COMMISSIONERS AND DAIRY INSPECTORS

Inspection and educational work relative to sanitary conditions of dairy farms, cream buying stations, creameries, condensed milk factories, cheese factories, ice cream factories.

EDUCATIONAL WORK AT CREAMERIES

Instructs butter-makers in new methods of handling raw materials and manufacture of butter.

Confers with and addresses creamery boards and assists in moulding policies of the creameries.

Assists in the building of new and remodeling of old creameries, and installation of new equipment.

Periodically checks moisture content of the butter being made.

Periodically checks salt content of the butter being made.

Studies methods of manufacture at the creameries for the purpose of increasing the efficiency of the plant.

Checks costs of production and costs of marketing.

Advises creamery as to the best sources of equipment and materials.

Assists in securing frequent and regular transportation facilities.

Assists in securing satisfactory markets in our eastern cities for butter.

Tests creamery scales, both test scale and platform scales, to insure accuracy and fair dealing.

School operators in conducting Babcock test.

Holds examinations to determine competency of candidates to hold license to perform Babcock test.

Checks and controls production of navy butter.

Checks and controls production of Iowa trade-marked butter.

Assists in the organization of cow-test associations and calf clubs.

Assists in educational work tending to promote greater and more economical production of milk and cream.

INSPECTION WORK IN THE FIELD

Inspects stocks of butter and butter substitutes at warehouses, stores, bakeries and restaurants to see that illegal butter and illegal butter substitutes are not carried on stock or offered for sale.

Investigates and conducts cases relative to testing of milk and cream by unlicensed Babcock operators.

Investigates complaints relative to unlicensed milk plants and milk depots.

Investigates complaints relative to false reading of Babcock test and other unfair practices.

Investigates complaints relative to the application of the anti-discrimination law as affecting the purchase of butter fat.

FUNCTION OF THE LOCAL MILK INSPECTORS

In charge of local milk inspection work under supervision of State Milk Inspector.

Inspects dairy farms supplying market milk to his district.

Inspects conditions, scores and keeps records as to sanitary conditions of dairies, milk plants and milk depots.

Periodically tests percentage of fat and solids in milk sold in his territory.

Periodically secures and forwards samples to the department laboratory for scoring and bacteriological analysis.

Investigates complaints as to quality of milk delivered and relative to violations of the laws pertaining to production and sale of milk in his territory.

FOOD LAW

The object of the food law is to prevent the manufacture and sale of harmful, deleterious and adulterated foods, or foods which are sold under false representation as to their quality or value.

FUNCTION OF FOOD INSPECTORS UNDER FOOD LAW

Inspect Iowa establishments where foods are manufactured to see that no harmful or fraudulent adulterant enters their composition.

Inspects conditions under which foods are stored, transporated and sold to see that adulteration is not practiced.

Surveys and forwards to laboratory samples of foods which he suspects or concerning which he receives complaint as to quality, adulteration or short weight.

Inspects retail establishments to see that no illegal foodstuffs are carried in stock.

Inspects quality of eggs, poultry and other farm produce sold to buyers and handled through trade channels to see that these products are not spoiled or in a condition which would lead to their being spoiled before reaching the consumer.

SANITARY LAW

The object of the sanitary law is to insure cleanliness in the manufacture, distribution and sale of foods.

FUNCTIONS OF INSPECTORS UNDER SANITARY LAW

Determines sanitary conditions in establishments where foods are manufactured, prepared, stored and sold.

Sees that raw materials are in sound condition and that decayed and other unwholesome materials are kept out of food products.

Sees that no diseased persons are employed in establishments where foods are manufactured or sold.

Sees that foods are properly protected from dust, dirt, foul odors, flies, rodents, and other contaminating agencies.

Sees that restaurants, hotels and other similar establishments maintain proper toilet and washroom facilities in order that employes can keep clean.

SEED LAW

The object of this law is to prevent the sale of undesirable varieties of seeds, seeds of low germination, dirty seeds, seeds containing excessive amounts of weed seeds, and seeds which are short in weight.

FUNCTION OF INSPECTORS

Inspects seed houses to see that seeds are properly cleaned and stored.

Traces origin of seeds to see that undesirable and too slow maturing varieties are not imported.

Sees that packages of seeds are full weight.

Investigates complaints relative to fraudulent dealing in seeds.

Samples stocks of seeds and sends samples to laboratory for analysis.

WEIGHTS AND MEASURE LAW

The object of the Weights and Measure law is to secure for all the true weight or measure of the commodity sold or purchased.

FUNCTION OF THE WEIGHT AND MEASURE INSPECTORS

Inspects and tests accuracy of all weights, measures and scales used in the purchase and sale of articles of commerce.

Checks weights or measures of articles bought and sold by weight or measure to see that proper weights and measures have been given.

Inspects heavy wagon, elevator and mine scales to see that they are properly installed and kept adjusted.

Investigates complaints relative to false weights and measures and other violations of the weights and measure law.

CONCENTRATED COMMERCIAL FEEDING STUFFS LAW

The object of this law is to secure fair dealing in the sale of commercial feeds.

FUNCTION OF INSPECTORS

Examine stocks of feeds to see that they are properly labeled as to quality, etc., and to forward samples to laboratory for analysis and comparison of feeding value.

Inspects stocks of feeds to see that packages bear tax tags.

Other laws enforced by this department are:

Paint and Linseed Oil Law,
Egg Law,
Turpentine Law,
Cold Storage Law,
Commercial Fertilizer Law,
Calcium Carbide Law,
Insecticide and Fungicide Law.

The duties of inspectors under these laws are similar to their duties under the laws in which duties are set forth in detail.

The following tabulation shows the nature of samples analyzed in our laboratory during the year:

Cream and Milk	1,547
Ice Cream	159
Miscellaneous Food Products	453
Samples for Attorney General and County Attorneys	60
Samples for Pharmacy Commission	9
Stock Foods	139
Seeds	25
Bacteriological Analysis	82
Total	2,474

CITY MILK LICENSES

Table showing the number of milk licenses issued to city milk dealers for year from 1910 to 1919. In each case the year ends on July 4th.

Year	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Number	1,106	1,310	1,908	2,038	2,189	2,365	2,729	2,858	2,936	2,718

CREAMERY STATISTICS OF IOWA

SHOWING POUNDS OF MILK AND CREAM RECEIVED, POUNDS OF BUTTER MADE AND DISPOSITION OF SAME, SO FAR AS REPORTED.

COUNTY	No. of creameries reported	Pounds of milk received	Pounds of cream received	Pounds of butter manufactured	Pounds sold to patrons	Pounds sold outside of Iowa	Pounds sold in Iowa
Adair	2	95,645	708,224	219,460	20,562	142,642	56,256
Adams	1	------------	------------	45,670	------------	------------	------------
Allamakee	6	------------	5,987,072	1,666,259	48,232	1,275,437	89,375
Audubon	6	18,592	892,081	250,086	30,388	282,816	46,396
Benton	2	116,800	333,331	136,614	3,904	58,110	72,924
Black Hawk	10	8,693,192	5,095,112	2,335,028	88,276	1,418,720	688,410
Boone	1	------------	1,602,003	39,946	13,391	232,598	205,045
Bremer	21	49,548,980	2,912,121	3,952,944	185,422	2,095,656	105,136
Buchanan	7	11,967,628	2,760,903	1,373,744	103,149	1,212,473	87,396
Buena Vista	4	682,940	1,322,411	451,077	93,781	106,072	106,072
Butler	9	4,307,095	3,201,818	2,214,323	73,040	1,249,647	142,659
Calhoun	2	74,355	538,667	732,576	19,369	189,573	73,684
Carroll	7	279,555	2,121,762	783,992	19,696	403,438	361,681
Cass	2	------------	488,313	437,584	539	505,381	59,067
Cedar	6	5,378	3,626,788	614,174	49,772	900,246	290,660
Cerro Gordo	7	913,918	8,705,880	3,439,452	51,269	2,623,363	182,109
Cherokee	1	------------	39,555	13,188	1,314	7,231	4,640
Chickasaw	9	4,493,303	6,667,649	2,363,533	142,153	2,155,039	66,314
Clay	6	231,000	632,758	840,815	21,191	344,610	23,335
Clayton	12	15,316,261	5,614,233	2,382,688	101,803	2,116,426	90,900
Clinton	5	25,552	1,243,379	1,907,087	1,503,812	1,850,116	72,306
Crawford	1	92,817	1,106,661	482,550	260	442,845	22.343
Dallas	1	------------	83,164	24,949	2,247	6,503	16,194
Delaware	12	8,790,746	5,282,821	2,023,057	148,987	1,721,281	142,799
Des Moines	1	12,750	619,725	333,580	885	102,952	236,935
Dickinson	3	------------	972,976	345,469	14,447	172,435	64,881
Dubuque	14	6,514,350	6,672,955	5,035,801	76,726	3,792,571	84,055
Emmet	2	30,058	1,256,994	366,913	29,489	191,425	10,898

CREAMERY STATISTICS OF IOWA—Continued.

COUNTY	No. of creameries reported	Pounds of milk received	Pounds of cream received	Pounds of butter manufactured	Pounds sold to patrons	Pounds sold outside of Iowa	Pounds sold in Iowa
Fayette	19	27,401,786	7,693,434	3,699,786	185,608	2,790,639	191,926
Floyd	4	68,710	1,137,256	655,323	18,306	522,180	166,648
Franklin	5	33,616	2,558,160	696,576	31,743	476,253	39,467
Greene	1	------------	38,888	17,001	354	3,167	13,480
Grundy	3	480,807	7,496,253	427,808	27,458	425,660	3,454
Guthrie	3	42,764	691,535	208,120	10,298	70,776	136,248
Hamilton	3	------------	208,222	68,409	5,890	44,648	2,556
Hancock	6	593,101	3,661,319	1,176,317	51,521	1,044,020	66,259
Hardin	10	233,582	7,530,151	2,365,165	84,068	1,982,162	242,710
Henry	1	150,000	------------	14,500	------------	------------	----------
Howard	8	1,500,100	6,648,971	1,727,406	124,443	1,522,038	6,035
Humboldt	5	------------	1,397,978	538,352	49,171	293,293	154,323
Ida	1	not	churning				
Iowa	5	60,000	633,506	200,330	21,309	123,040	55,825
Jackson	7	79,147	6,096,991	1,081,444	32,697	966,131	411,073
Jasper	2	------------	422,630	134,929	4,597	53,132	67,200
Johnson	2	------------	1,634,268	328,593	------------	152,514	161,279
Jones	6	371,515	5,745,559	1,742,058	102,255	1,543,027	96,769
Keokuk	2	421,193	1,135,181	439,329	1,000	369,729	68,600
Kossuth	12	240,081	5,444,818	1,466,108	138,721	1,022,044	117,351
Lee	2	------------	5,795,274	2,194,983	------------	7,183,396	223,084
Linn	6	------------	4,820,113	1,784,410	67,130	1,445,730	241,058
Lucas	1	------------	509,393	186,550	------------	------------	186,550
Lyon	3	------------	664,702	641,854	1,060	613,862	26,942
Mahaska	2	------------	235,726	285,383	2,600	131,368	----------
Marion	1	------------	------------	133,799	------------	10,422	33,450
Marshall	3	95,578	1,394,626	579,947	19,661	350,677	180,990
Mitchell	7	776,856	10,374,823	1,503,892	88,259	1,350,273	49,393
Mills	1	------------	134,620	50,630	715	29,879	20,046
Monroe	1	125,000	150,000	65,000	------------	20,000	45,000
Montgomery	2	448,261	409,470	154,783	------------	------------	1,016
Muscatine	1	33,692	386,375	105,875	4,633	49,743	51,582
O'Brien	4	238,766	1,713,644	591,970	38,328	436,643	115,107
Osceola	3	100,017	773,542	360,386	28,487	187,112	26,787
Page	1	------------	758,189	951,098	------------	856,345	35,959
Palo Alto	8	577,218	3,120,481	1,037,038	117,848	848,363	91,621
Plymouth	1	410,397	123,793	58,244	------------	------------	58,224
Pocahontas	3	40,000	405,149	154,395	5,159	113,849	35,387
Polk	3	540,015	3,956,740	3,592,224	------------	1,061,509	2,510,713
Pottawattamie	1	------------	1,077,516	1,341,676	------------	1,110,357	267,903
Poweshiek	2	219,368	526,368	121,083	5,627	54,150	61,300
Ringgold	1	------------	180,000	50,000	500	30,000	20,000
Sac	2	182,472	489,503	172,554	19,764	82,651	70,238
Scott	3	------------	1,572,117	563,205	8,658	394,253	269,324
Shelby	2	------------	275,675	105,174	12,143	81,143	12,000
Sioux	8	496,355	3,714,812	1,873,456	97,991	1,618,760	105,593
Story	6	468,780	4,408,217	557,172	57,552	413,461	86,149
Tama	3	36,000	909,192	698,195	8,589	630,624	58,772
Taylor	1	------------	124,860	150,546	16,500	77,546	56,500
Union	2	71,700	7,693,434	3,699,786	------------	750,193	33,410
Van Buren	1	------------	112,670	37,255	2,528	33,752	975
Wapello	3	64,200	2,902,898	2,373,251	300	1,971,486	404,765
Wayne	1	------------	2,268,194	792,185	1,982	745,383	44,820
Webster	4	90,332	1,678,296	405,378	1,958	58,886	344,534
Winnebago	8	641,038	4,997,495	1,408,391	145,618	1,372,649	59,938
Winneshiek	10	------------	7,747,083	2,751,385	46,725	2,594,044	103,176
Woodbury	3	2,863,414	29,689,261	12,689,261	10,350	11,894,288	835,977
Worth	9	22,908	3,796,271	1,314,460	232,150	1,173,951	57,759
Wright	3	210,772	1,115,910	274,198	12,628	130,196	79,980
TOTAL	393	154,249,983	334,331,326	90,915,938	4,878,592	79,647,236	12,259,116

PART VII

Corn Belt Meat Producers Association

Fifteenth Annual Convention

Hotel Savery III, Des Moines, Iowa, February 19-20, 1920.

Meeting called to order by the chairman.

Invocation by Rev. W. P. McCormick.

Report of President A. Sykes.

Mr. Sykes: Before I start with my report I should like to make an explanation to the effect that this meeting of our association was originally called for December. At that time I prepared my annual report. Since that time, however, there have been some changes in the situation covered by the report. Some things have happened that were not contemplated then, and some of the things covered in this report, because of changed conditions, may not seem quite up to date. However, I have made some corrections in it, but I did not consider it necessary, nor did I have time, to rewrite it in full, and so we have got it in this form, and I make this explanation so you may understand it as I go through with it.

It seems that we have been exceedingly unfortunate with our annual meeting. We had planned to hold it in December, but the coal shortage at that time was at its worst and conditions were so acute that the fuel administration would not permit public meetings of this kind to be held in the city of Des Moines.

At that time we thought that we would be able to hold the meeting the latter part of January, but we found that there were so many conventions and other things of that kind on that interfered with our speakers that we were unable to secure suitable dates up to the present time. And now that we are here we are combatting the flu, which is raging throughout the state. So that it seems to me we are exceedingly unfortunate in what arrangements we have been able to make for our annual meeting.

ANNUAL ADDRESS OF PRESIDENT SYKES.

Recalling the events and conditions that prevailed at the holding of your last annual meeting, you will doubtless remember that your train service to Chicago on live stock was most deplorable, and that it was not only difficult to secure cars, but after having loaded his stock, the shipper would hardly dare venture a guess as to when it would arrive on the market, and it is needless for me to add that on account of these inexcusable delays shippers were losing thousands of dollars daily, in extra shrink and feed bills.

So on account of this very serious situation, complaints were made by your officers to Mr. Chambers, director of traffic at Washington, and he decided to send to your annual meeting J. L. Harris, chairman of the live stock committee of the railroad administration, to conduct hearings, make investigations and if possible locate the trouble and to see to it that the service and accommodations were improved, so accordingly, the afternoon of the last day of your annual meeting was consumed in submitting to Mr. Harris both oral and written statements from farmers and stock men, concerning the very unsatisfactory service and the tremendous losses caused by same. At the conclusion of this hearing, Mr. Harris stated frankly that we had just grounds for complaint, and that something must be done to improve the service and deliver the stock to the market on time. After a brief consultation with your officers it was decided to hold another hearing in Chicago a little later on, so accordingly, about February 12th, Mr. Harris called together the regional directors, the general superintendents, and the operating departments of the various railroads of the middle west, together with the stock men, to finish the job begun at your annual meeting in Des Moines.

There was gathered together at this hearing some fifty to sixty railroad representatives of the various lines, besides a large number of stock men and members of the live stock exchange.

This was indeed a most interesting and profitable hearing as every phase of the live stock service from the time the live stock enters the loading pens, until it is unloaded at the Chicago yards, including also the accommodations provided for stock men, was gone into in a very thoro and practical way, and when it closed all parties connected with the transportation and delivery of live stock pledged themselves to a program that, when carried out, would mean a greatly improved service, and on the following day a conference was held with the operating department and regional directors and a schedule of train service was worked out and put into operation as rapidly as possible, which delivered the stock to the Union Stock Yards during the spring and summer in good time for the market. The tabulated reports on arrivals show that from 80 to ’5 per cent of the cars arrived at the unloading chutes before eight o’clock in the morning; the facts are, there has not been a greater revolution in the live stock service in delivering the stock to the Chicago market than was brought about thru this work which your association was responsible for. We wish to express our most hearty commendation and to assure both Mr. Chambers and Mr. Harris that as an association we appreciate their united efforts in bringing this about.

Mr. Harris is an efficient and thoro-going railroad man as well as the avowed friend of the stock men, and the work which he did for them in the improvement of their service saved them thousands of dollars in feed bills and increased shrink.

Now, I have not gone into the service we have put up with since the writing of this report this winter, and, of course, that matter will be gone into during this convention and I feel it would be useless for me to take up your time at this time to enlarge on current conditions, especially during the past two months. Mr. Harris is here and will speak to you about it, as well as others, when those subjects properly come before you, and for that reason this part of the report should not be criticised because up to the date of the writing of it our service was fairly satisfactory.

LOSS AND DAMAGE CLAIMS.

You will doubtless remember that at the time of holding your last annual meeting the question of settling loss and damage claims of live stock was very much up in the air, as very few claims were being settled and your officers had been working on this matter with the railroad administration at Washington for several months. These efforts finally culminated in Mr. Howard, chief of the claim department, appointing a committee of claim agents headed by Mr. Walton, of St. Louis, to represent the railroads, and directing Mr. Walton to call a meeting of the stock men in the near future at which time a similar committee should be selected from the live stock interests. The two committees would then get together and endeavor to work out a set of uniform rules and regulations which would serve as a basis for the submission and settlement of loss and damage claims over the entire country, so accordingly Mr. Walton called a conference at St. Louis on March 18th, and Mr. Thorne, your president and others representing your interests, were present and took part in the proceedings, which resulted in a general committee of some twenty-five members being selected and out of this, a sub-committee of seven, of whom Mr. Thorne and myself were each named as members. This sub-committee was to meet with the committee representing the railroads and try if possible to arrive at a solution of the difficult problems.

The draft of rules and regulations which had been prepared by the committee from the railroads was presented to the stock men and seemed so unreasonable and unfair that they were rejected as a whole, on the theory that they were impracticable and unfair and would rob the shipper of the rights and privileges which he already enjoyed.

After a day and night session at St. Louis in threshing over these matters and making but little progress it was decided to adjourn to meet in Chicago the early part of May to make a further attempt to get together, and in the meantime the live stock committee drafted a set of rules and regulations which it felt would be fairly satisfactory to the stock men and was prepared to submit them to the railroad people at the Chicago meeting.

This meeting proved to be a very boisterous one, and soon developed into one of the fiercest contests ever staged between the railroads and the stock men, the bitterest part of the fight centering around the question of shrink. The railroads took the position that there was no commercial loss to the shipper in the form of shrink on his live stock on account of it being delayed and arriving twenty-four to forty-eight hours late on the market; in other words, they undertook to prove by what they chose to call expert testimony that there was no such thing as shrink only in the minds of the stock men, and that they should not be paid for this imaginary loss. Their untenable position so incensed your representatives that a pitched battle at once was staged and soon became exceedingly unpleasant and the stock men poured such hot shot and steady fire into their ranks that before the close of the second day's hearing they withdrew from their opposition and were willing to admit that we at least sustained a loss of commercial weight.

After this and some minor points were won by the representatives of the stock men, the sub-committees went into executive session to try if possible to get together on the general draft of the rules. Three days and nights were spent in almost continuous sessions in an attempt to reach an agreement as to a uniform set of rules and regulations for the settlement of these claims, but without succeeding, and on Saturday afternoon after spending the entire week the two sub-committees deadlocked in what seemed to be a hopeless attempt to agree upon a proper allowance for shrink for the different kinds of live stock, and the various kinds of delays, so an adjournment was taken to meet again later on and try it over. This was done and at the second meeting, which was held in July, a real determination was manifest to try if possible to get together and agree upon something definite which could be submitted to the administration at Washington. So after a three-days' strenuous session this was finally accomplished and a set of rules and regulations was unanimously adopted by the two committees and sent to Washington with the recommendation that they be accepted and published and put in force by order of the director general of railroads. This, however, has not been done, and we are still operating under the old system of catch-as-catch-can in the settlement of claims, and I regret to inform you that I have just recently been notified that Mr. J. W. Howard, the head of the claims department at Washington, has refused to recommend to the director general the adoption of the rules and regulations as adopted by the sub-committees at Chicago. However, I believe that this general stirring up has had a very wholesome effect on the railroads and claim agents, as I understand they have been cleaning up a lot of delayed claims in the last three or four months and I wish in this way to publicly urge upon all farmers and stock men who have claims pending to keep right after them; don't let up and get discouraged. The railroads are just as much obligated to pay all just claims as when they were under private control, so don't let them hoodwink or mislead you by the plea that they are not liable.

THE SECOND CUMMINS AMENDMENT.

In circulating among the farmers during the past season I have been told that some railroad agents are still insisting that they place a valuation upon their stock when billing it out. I am certainly surprised at the great ignorance displayed by these men, and I want to again inform you one and all that the second Cummins amendment to the Interstate Commerce Act distinctly prohibits the carriers from limiting their liability by contract on shipments of ordinary live stock, and that you are not required to either place a valuation upon your stock or to pay a higher rate in order to insure full payment if lost or killed while in transit.

PRODUCERS' AND PACKERS' COMMITTEE.

Another matter which I have reason to believe you are interested in, was the organization last spring of the Producers' Committee of Fifteen, to meet with a similar committee of the packers from time to time to try to iron out, if possible, many of the differences and difficulties which arise between the stock men and the packers.

Instead of a joint committee with the packers being formed as was first suggested and urged by the packers and some of the live stock representatives, it was thought best by your officers and others to organize a separate, independent committee representing the live stock interests and to let the packers do the same. This plan was finally agreed to and the producers' committee was organized in May and Mr. Wallace, your secretary, was made chairman of the whole committee. I am not so familiar with the work of these committees except that I was invited to attend one of their meetings in Chicago in July and was very much impressed with the frank and open discussions from both sides and the business-like methods which each advanced to overcome many of the difficulties and problems which confront the live stock industry, and I have felt in my own mind that the July meeting held with the packers had a great deal to do with the marked improvement made in the beef cattle market soon after, and I feel more such meetings should be held and that packers and stock men should get a better understanding of each other's problems and when the markets are being pounded down to a point that denotes ruin to the industry and bankruptcy to the stock men that representatives of these interests should get together and make an honest and determined effort to find out what can be done to improve the situation and save the producers from such terrible losses as they have sustained during the past six or eight months.

I regret to chronicle the fact that according to the press reports that at a meeting held by the producers' committee in December it was voted to disband and turn the work over to the American Farm Bureau Federation. I most earnestly hope that the Federation will take up the work as suggested by the producers' committee and that a strong and efficient committee will be selected to work with the packers and correct many of the very serious problems that at the present time seem to spell ruin to the live stock industry.

FEDERAL RAILROAD LEGISLATION.

Other important work was done by your association in carefully looking after railroad and other legislation during the past year. The first of this was the valuable assistance rendered in the framing and passage of the Cummins bill, which restored to the Interstate Commerce Commission full rate-making and control powers, such as was possessed prior to the war. Unfortunately, after the bill was passed by both houses of congress it was vetoed by the president. Then came the long-drawn-out fight on railroad legislation as to our attitude towards the roads when they are turned back to private ownership. This legislation, aside from the Peace Treaty and League of Nations, is the most important and means more to the American people than anything considered by congress since the close of the war.

Two bills were prepared and introduced in congress, one known as the Cummins bill in the senate, the other as the Esch bill in the house; neither of which were satisfactory. Strong efforts were made to amend them before passing the respective houses in which they were introduced. However, satisfactory progress was not made in this way and the bills were finally passed by their respective houses and reported to a conference committee in a form that was very unsatisfactory to the shipping public at large. So on December 29th a general conference of representatives of shippers' organizations was called to meet in Chicago to consider pending railroad legislation and work out if possible some plan to secure important amendments which it was felt should be made to the bills.

Some two hundred representatives of various shipping interests met in this conference and your association was represented by your attorney, Mr. Thorne, and myself. At this conference a legislative committee composed of some twenty-four men, which included Mr. Thorne and your president, was selected to draft a memorial setting forth our position and requesting that certain amendments be made to the bill by the joint conferees, before it was submitted for final passage; this memorial to be presented by the committee to the joint conference committee at Washington who was considering the bill.

As a result of the efficient work done by this committee while in Washington the transportation board, the enforced consolidation of parallel lines, the pooling of earnings and other bad features of the bill were eliminated and amended until as it now stands, with the exception of the 5½ per cent guarantee, I feel that we have a fairly good bill. We have strenuously and consistently opposed the guarantee feature of the bill on the grounds that it removes the incentive to personal initiative and the desire on the part of officials of one line to excel both in service and earnings the other competing lines, and that it is a bad and dangerous policy for our government to begin the custom of guaranteeing to private corporations certain dividends.

Another legislative matter of very great importance to our members and farmers in general was in securing an amendment to the income and excess profit tax law, which exempts individuals and partnerships from the operation of the excess profits tax feature of the old law.

Under the 1917 law the individual whose income was sufficiently large was required to pay an excess profits tax based on his invested capital as well as an income tax, and this worked a very great hardship on the farmer who bought his land when it was cheap, as under the rulings and administration of the department his invested capital was kept down to a very low point, therefore his per cent of earnings would show up very large on his capital invested.

To illustrate: The farmer who bought a quarter section of land at $50 per acre would only have one-fourth as much invested capital in the land, according to the ruling of the department, as the man who ten or fifteen years later bought his farm of 160 acres at $200 per acre.

The law as it was applied in 1918 not only worked a very great hardship on a large number of farmers, but placed those who had bought their land when it was comparatively cheap at a very serious disadvantage in competing with the more fortunate neighbor who had purchased his land later at $150 to $200 per acre, because the farmer who could show a large capital investment on account of having purchased his land in later years was entirely exempt from the excess tax, while the other was taxed beyond reason.

During the spring and summer of 1918 it became very apparent that something must be done to remove the discrimination that seemed to be unavoidable under the interpretation of the 1917 law, and to tax all farmers alike on their net incomes regardless of the time they purchased their land, so the first time I was in Washington I took the matter up with our Iowa senators and others, including the chairman of the senate finance committee, and all agreed that the easiest and simplest way to correct the whole matter was to exempt individuals and partnerships from the operation of the excess profits tax law in the war revenue bill, which was then being framed, so this was accordingly done, but was again restored to the bill after it was introduced in the senate, and then came on the fight to have it stricken out, which was finally accomplished and the bill was passed by both houses and signed by the president as amended, and the farmer is now exempted from making an excess profits tax report, or paying excess taxes on his income. This very greatly simplifies the income tax law, and makes it much more equitable to the farmers in general than the 1917 law.

STOCK YARDS AND PACKER LEGISLATION.

Legislation for federal supervision and control of the stock yards and meat packing industry has been on the calendar at Washington for the past fifteen months. Federal investigations and threatened prosecutions of the big packers were rife during the summer and fall until finally to cap the climax the federal department of justice in December published in the daily press the substance of an agreement or contract entered into by the five big packers and the government in which the packers agreed to dispose of all of their side-line business and confine their efforts strictly to the meat packing business and other lines directly connected with it. This move on the part of the packers at once removed the necessity for the enactment into law of some sections of the Kenyon-Kendricks bill which had been before the agricultural committee of the senate and on which voluminous hearings and testimony had been submitted to this committee. So as a result of this move on the part of the government and the packers a new bill has been framed and is now being considered by the committee. This bill, I think, largely meets the objections of the packers as it does away with the licensing of the packers, does not interfere with the movement of their refrigerator cars and provides for the creation of a non-partisan commission appointed by the president which shall have supervision of the entire marketing and slaughtering end of the live stock business.

No sane live stock producer wishes to have legislation passed that would in any way interfere with the fullest and freest legitimate operations of the stock yards and packing industries of the country. Neither do we want to be everlastingly made the goat and be punished as we have in the past for something we have not been responsible for, every time the consuming public or some other solicitous body jumps out and demands an investigation of the packers. And I am fully persuaded that the men who are so tenaciously opposing sane and constructive legislation for the proper supervision and control of the marketing and slaughtering of live stock are standing in their own light, and only postponing the final day of reckoning, which is bound to come.

The developments made at the Chicago and other markets under investigations of the Federal Bureau of Markets would lead us to the conclusion that there are at least some men engaged in the live stock commission business who are not absolutely honest. And for this reason we believe that government supervision over these utilities will not in any way hamper the honest commission merchant, while it will at the same time prevent those who are inclined to petty dishonesty from taking advantage of the situation and robbing the stockmen in various ways, as they have in the past. Had it not been for the fact that the government in 1918 as a war measure took over the stock yards and commission merchants, none of this crooked work, which in some cases had been carried on for years, would have been unearthed.

After going into this whole matter carefully and considerately, I am convinced in my own mind that the whole matter can only be settled correctly by the enactment of proper legislation placing the marketing and slaughtering end of the live-stock industry under proper government supervision and control and that this control should be vested in a non-partisan commission composed of business and live-stock men appointed by the president and confirmed by the senate, and until we get such legislation we will be constantly vexed with these periodical demands for investigations and legislation for controlling these interests which in turn will bring on unsettled conditions in the live-stock business and bad breaks in the market, which mean heavy losses to the live-stock producers of the country. So I believe that we should urge upon congress the necessity of speedy action in the passage of such legislation and get this question settled once and for all.

Another matter which I wish to call your attention to, is the policy adopted by the Illinois Central Railroad of refusing to install new scales at stock yards, where the old ones have become unserviceable, and of selling the scales that are in good repair at the various yards to private parties, is this practice invariably works a hardship and discrimination against the Farmers' and the Co-operative Shipping Associations.

I beleve this association should condemn this practice on the part of the Illinois Central Railroad and should take immediate steps, if possible, to see that it is stopped.

Let us now turn our attention to things more of a domestic and economic nature which strike at the very heart and soul of American agriculture and animal husbandry. These industries have been passing thru the most crucial periods almost ever since the beginning of war hostilities and especially is this true for the past seven months, during which period the price of hogs, which is our greatest money-producing crop, has decreased in price at times from eight to eleven dollars per hundredweight under what they were at the high point and the Iowa farmers have marketed a large per cent of their hog crop at from four to five dollars per hundredweight less than the actual cost of production. This in the aggregate means a total loss to Iowa farmers for the year of from eighty to one hundred million dollars. A heavy loss was also sustained by the rapid decline in the corn market during the fall, to say nothing of the staggering losses sustained on cattle and sheep.

Iowa is essentially an agricultural state; all other industries sink into insignificance when compared with the vastness of her agriculture and live stock and when two hundred million is clipped from the yearly income of the Iowa farmers by deliberate raids upon the prices of farm products and live stock, under the guise of reducing the high cost of living, it is high time for the farmers and producers to speak out and let labor organizations and the consuming public know that they do not longer propose to be made the goat in this matter and to serve notice on all concerned that if it is their policy to demand shorter hours and higher pay, thus greatly increasing the cost of what they produce which the farmer must buy, that the farmers and stockmen will insist and demand that their time and wage be figured on the same basis and that the price of the food products which they produce shall be based on the cost of production plus a reasonable profit. ,

Much as I hesitate to advocate or even suggest a restriction in farm production it is the only course that I can now see open to the farmers to bring the price of their products up to a point that means a living wage to the producers. I consider it exceedingly unfortunate that the city dweller and the mass of the consuming public seem to have no conception whatever of what it costs to produce beef, pork, mutton, corn, wheat and all other food products on this high-priced land under existing conditions and that they should feel that the farmers are the arch-criminals in profiteering and that they fail to understand that the farmers have nothing to say in fixing the price on their products. The facts are that every economist knows that when compared with the actual cost of production, that farm products and especially meat animals, have been by far the cheapest articles bought and sold in the market for months past.

The farmers are not complaining so much because the things they produce have been forced down in price but are rather complaining against the unfairness and inequality of a system and policies that force the price of his wares below the cost of production and permits all manufactured products which he must buy to continually advance in price. If the products of the factory, the forest and the mine had declined proportionately in price with farm products, then no farmer's voice, whether he be great or small, would have been heard protesting against the reduction in the price of his produce, but because what he must buy has increased in price continuously the past year while he has to sell his products at a reduction of from 25 to 50 per cent. These are the things that make the patient, long-suffering farmers feel like rebelling and announcing to the powers that be that from this on they will play the game the same as the other fellow. Until the farmers make up their minds to do this they will continually be made the goat and be left holding the sack.

If the farmers of this country will demand the same wage scale, based on the eight-hour day, adopted by union labor, and time and one-half for overtime, they can solve the question of remunerative prices of farm products inside the next two years, and be able to fix the price of their wares on the same basis as is used by the manufacturer, which is the cost of production plus a reasonable profit.

No class of citizens have toiled and sacrificed and taken chances as have the farmers laboring much of the time under the most unfavorable weather conditions; they have worked from twelve to sixteen hours a day when it was one hundred in the shade in the summer and twenty below zero in the winter that they might do their bit in furnishing food for a hungry world, being assured by such men as Herbert Hoover, Thomas Wilson and others that there would be unlimited demand at remunerative prices for all that could be produced; but lo and behold, before they had scarcely started to harvest their present crop they were informed that prices were too high and must come down and down they sure did come, so far as the farmers' products were concerned, but nothing else, and now we are wondering what hit us and why the products of the factories, the forest and the mine have not suffered a like decline in price. The answer is a restricted production, apparently cunningly devised and aggravated by labor's position of continually demanding higher wages and shorter hours for a day's work.

Shall we, then, as farmers, continue to toil and sacrifice and blindly produce unlimited quantities of food and sell it far below the cost of production, or shall we organize intelligently and be in a position to demand that the cost of production shall be one of the chief factors to be considered in fixing the price on our products?

During the early part of August the government with a great flourish of power, pestered and nagged by the demands of organized labor for higher wages on the one hand and the consumers' league for the lowering of the high cost of living on the other, jumped out and launched a great national drive against the high cost of living. Wonderful threats and warnings were given out by the head of the department of justice, the little and the big tanks were all gotten in readiness to sweep from the face of the earth everything that offended or tended to profiteering, and the H. C. of L. was at once to be brought down from its exalted perch, but what has been the result? The unsophisticated, unorganized farmers have been fleeced out of hundreds of millions of dollars by this well-directed drive against farm products and live stock which has resulted in demoralized markets for the last six months, and who has been benefited? The packer, the speculator and the retailer, but scarcely a bit to the consumer. And will the attorney general or some of his aids please name one manufactured article that the farmer buys on the market that has been reduced in price by this widely advertised drive against the high cost of living? This, then, being true, is it not about time that the government square itself with the farmer by either reducing the prices of the things he must buy or assist him in securing for his products prices that will be on a parity with the products of the factories, the forest and the mine?

Let us now turn for a few minutes to take a sort of retrospective view of your association as it is the proper season of the year for all to take stock and find where we stand. During 1917 and 1918 the time of your officers was so taken up in war activities and other important matters and there were so many demands made upon the farmers that but little attention was given to building up your association or increasing its membership, but I am glad to state to you that the past year has been one of especial activities, in building up and increasing the membership of your association. It has experienced a most healthy and vigorous growth and had the weather not been so unfavorable for pushing the membership drive during the early summer and late fall months your organization would have shown almost a miraculous growth.

We were unable to secure any assistance in the field work until the latter part of August, when Mr. Clarence Pickard, of Indianola, was finally secured and took up the work along with myself, and when we consider the many delays caused by rain and bad roads certainly a very creditable showing has been made. A good, strong membership has been established in some ten or twelve counties where hitherto we have not been organized, besides a number of counties have been worked for renewals and new members, and in most of these counties we secured a very representative and satisfactory membership. This is the logical time to push your association, the farmers are in the proper mood to organize them, they feel the urgent necessity for organization and closer co-operation. Your association has made a splendid record in the past and it appeals to them from the standpoint of securing definite results, and it is largely a question of putting men in the field to wait upon the farmers and secure their memberships, as hundreds of them are waiting for an opportunity to join this association, so I would suggest that you elect a president who can give his entire attention to this work, and aside from this you should secure at least three more men who can go out into the general field work and round up the memberships in the various counties where you are not yet represented. If such a program as this is put on and pushed the coming year, your association will come under the wire at the next annual meeting with its membership twice doubled and representation in most of the counties in the state.

REPRESENTATIVE AT UNION STOCK YARDS.

The question of placing a representative of this association at the Union Stock Yard has been under consideration by your officers for some time past, but after considering the matter to some extent it was decided to defer any definite action until after this meeting so that those present might be given an opportunity to express their views on the advisability of such a move, so in due course of procedure this matter should be taken up by your body and considered so that your officers will know what is your wish.

Another matter that my attention has been frequently called to during the summer is the matter of having a personal representative of this association in Washingon when congress is in session. As I have come in touch with our people over the state many of our best men have insisted that this organization should have a representative at the seat of government when the legislative mill is grinding, and on my recent visit to Washington this same matter was urged upon me by members of both the house and senate. There isn't any question that this would be a move in the right direction and that such a representative would be of great benefit to our farmers, and of valuable assistance to members of congress in solving many of the problems which arise, and I believe it is a matter that should be given your careful consideration at this meeting and at least give an expression to your officers in regard to this matter.

During the past year death has entered our ranks and removed from your official board one of our stalwart and leading men who has been with us since our birth. I refer to the lamented David Muir, of Hampton, the director from the third congressional district, who passed away during the month of March this year. Mr. Muir represented a fine type of American citizenship, a man of sterling integrity and high ideals, always interested in the things that make for better community life he gave unstintingly of his time and his money to make your organization a success. He possessed a deep-rooted conviction of the importance of the work to be done by this association and took great pride in its success. He attended every annual meeting save the last, and ill health alone prevented him from attending this. We will miss very greatly the sane and sober counsels of David Muir and deeply mourn his departure, and I would recommend that a committee of three be named to prepare a suitable memorial of the deceased and the same be incorporated in the coming annual report and copies mailed to his wife and daughter.

Also since coming here to this meeting I have learned, with sorrow, of the recent death of our old friend and co-laborer, D. W. Anglum, of Larchwood, Lyon county.

Mr. Anglum was a familiar figure at our annual meetings, was one time director from the eleventh district, and always took an active part in the general welfare of the association.

He will be greatly missed by all, and I feel that a fitting memorial or resolution of respect should be prepared by this association and printed in the coming annual report and a copy mailed to his family.

At this time I wish to state that I have taken up a number of local stock yards and other matters in different parts of the state and secured very satisfactory settlements in each case and have received some very appreciative letters from the farmers in those localities, and this leads me to again remind you that if you have transportation troubles, write your officers about them. They cannot help you unless they know about your troubles, but they are always ready and willing to do their part when you make your complaint.

FARM BUREAU FEDERATION.

In circulating among the farmers the question is frequently asked as to the attitude of the Farm Bureau Federation and the Corn Belt Meat Producers' Association to each other, and what will their policies be in the future. To such inquiries we wish to publicly state that there exists between the officers of the two organizations the kindliest feeling of co-operation and helpfulness and in the end to serve the farmers to the best of their abilities.

During the summer the secretary of the Farm Bureau Federation and county agents have referred to your president a number of complaints of various natures. These have been taken up and adjusted and I believe that all agree that we have been of mutual benefit to each other.

There is no question but what there is a place for each of these organizations, and plenty of work for each to do in its respective sphere, and the farmer should make each and both organizations of power and influence for their own protection, and not worry about this or that phase of the work, as the officers will no doubt see that that is properly distributed, so let us all boost our farmers' organizations during the coming year and make them what they should be.

In closing, I feel it my duty as well as a privilege to publicly thank one and all of the loyal men in the country who have contributed so liberally of their time and money during the past season to make our membership campaign a success, without which it would have been a failure. Had I the time and space these men all deserve special mention, for we certainly appreciate and admire their self-sacrificing efforts on behalf of this association, and again I wish to say, we thank you, and we shall always remember with pleasure and gratitude our associations together and the splendid assistance you rendered.

And to the board of directors and all who have co-operated so loyally in making your association a success, and in this number I wish to include the public press both daily and weekly, to all I wish to say, we thank you most heartily and assure you that we appreciate most fully your help and support. And now let us turn to the future: Your association has a long and honorable record back of it, and there lies before it a long and useful one. Yours is one of the pioneer organizations that has blazed the way, fought the farmer's battles and protected his interests for the last sixteen years. No one need apologize for the record it has made or be ashamed or abashed on account of being affiliated with it. It is one of the few live stock organizations that has properly focused and been a most potent factor in protecting and shaping the destinies of the Middle West. Its influence is felt in the councils of the nation, its officers are called in consultation on the most important questions affecting your interests, and its future will be largely what you make it, so let me admonish you to get a large vision of the work of your association for the future, and lay your plans and build to that end.

The Chairman: We at this time will have the report of the secretary.

THE COMMITTEE OF FIFTEEN.

Mr. Wallace: Before I make my report as secretary, I wish to add a word about what our president has said as to the producers' Committee of Fifteen. The president in his report told you how that happened to be formed, and he told you of his final action in turning over the work to the Farm Bureau Federation, but he didn't tell you just why that was done. The reason for that action was that we found it impractical to finance the Committee of Fifteen. At different meetings different plans were suggested, and it was perfectly evident that if the committee was to amount to very much, a very considerable sum of money should be raised. Some thought it might be possible to raise that fund through levying a fee of 10 cents a car on all cars received at stock markets. A committee was formed to look into it, but the committee didn't look into it. Others thought that the Farm Bureau Federation would contribute to it, and then it was thought that if the Farm Bureau was asked to contribute to it, perhaps it ought to have more to say than was contemplated at that time. The committee is still in evistence, but at the December meeting a motion was adopted that the National Federation of Farm Bureaus should be asked to take up the duties which it was supposed belonged to this Committee of Fifteen. That matter will be presented to the executive committee of the Federation when it meets on the 3d of March at Chicago. Now, is there a field for work of that particular sort? That's the question to be determined. I agree with Mr. Sykes that there is, but it is something that is going to take a long time to work out properly. I am perfectly frank to say to you that simply meeting with the packers, for instance, whenever there is a drop in prices, or when prices are unsatisfactory, and simply talking it over with them, doesn't get anywhere at all. Here is the reason for that: We get together with the packers

—and I want to say parenthetically that the principals of the packers, Mr. Armour, Mr. Swift, and all of them, came and met with us and spent the entire day in conference, and they were anxious and willing to give their time and their best thought to our problems—but here is what happened: No one yet has represented the farmers who has made a thorough study of the situation. We don't know our own business. When it comes to studying these price fluctuations, and what to do to meet them, we don't have the information, and so we come and talk with the packers and we say, "Something has got to be done," but what do the packers reply? They say, "Why, gentlemen, we are losing tremendously on our cattle ourselves." We say, "We are losing $50 or $60 a head on present quotations." And they say, "Gentlemen, you don't seem to realize that we also are losing—we are losing tremendously; we have lost $15,000,000 since January 1st, notwithstanding this reduction in price." What was our answer to that? What is the remedy for that? We at the present time do not have any sort of program at all. But what are you going to do about it? We have simply talked and have done nothing. If a committee of producers is going to get anywhere, it will have to study the game from every angle—from their standpoint and from ours—and then when we meet with the packers and they make an assertion we will have the evidence to check the correctness of it. And so it is we should prepare to meet the packers. Some people say, "Put your cards on the table," but when we get there we don't have any cards—we don't know anything about the situation.

Now, there is a certain investigational work that ought to be done by the producers. It is not spectacular work, at all; it is not going to be work that the members of the committee can perform, but it is going to be statistical work which when worked out should tell you how the price fluctuations should be eliminated and how your hogs and sheep are going to sell for more than the price of production. You cannot do that work yourself. Go hire some competent men who have training in statistical work, and economists, and then tell them to put their very best thought and time on the problem to study it from the angle of the stockman—the stock producer. We will say to such a man, "We will give you clerks and adding machines and money, and we want you to study this from our angle, and whenever you find out something that you think we ought to know about, call us together and tell us what the wise thing to do is." If that policy were adopted, we would get to know something about the matter, but until we do that our case is hopeless. We simply pass resolutions; we get together and confer and swear at those fellows and swear at the consumers, but we don't do anything else, and it doesn't help us in any way or get us anywhere.

Our thought has been to pass this matter to the Farm Bureau Federation. They have ample funds to set up a research and statistical department to do this work. I have done enough work with Mr. Wilson, of the packers, to know that they will cooperate with us in getting the data we need. I think we can get such co-operation as we need from all of the packers, for that matter. It is simply a matter of whether we are willing to stand by the guns and spend enough money, by hiring competent men, to have the work done that we admit we cannot do ourselves. That is the only basis that we can use in putting it up to the Farm Bureau Federation. That is the only basis on which we ourselves could get results. If we follow that plan, I feel satisfied that after a year or two we will get together information enough to meet the situation intelligently. The trouble with us is, and always has been, that we wait until the last moment before thinking of preparation, while the packers have been preparing for this for two years past. We should have foreseen this situation and gone to work on it two years ago, and if we had we would not be in the position we are now facing. We must look two years ahead instead of two years behind.

THE SECRETARY'S REPORT.

This has been the most successful year in the history of the association, measured by receipts. However, it has not been so successful measured by the work done, in spite of the fact that we have worked harder than ever before. I need not tell you this to convince you that the work of this association under government operation of railroads and under present unsettled conditions has been very difficult indeed.

Our receipts were $11,548.85; our expenditures were $8,673.58, distributed as follows:

Bank collection fees	$ 151.40
Annual meeting expenses	101.97
Directors' expenses	289.34
Refunds to county associations	154.50
Expenses of delegates to Washington, etc	432.51
Stamps, printing annual report, etc	1,271.11
Bonds for secretary-treasurer	20.00
American Live Stock Association	20.00
National board	200.00

Legal services	1,429.30
Clarence Pickard	936.84
President's salary and expenses	2,638.01
Secretary's office	1,000.00

This makes a total of $8,673.58, and leaves a balance on hand on the year's business of $2,875.27. I didn't carry the balances forward from last year, or from year to year, because that is included in the report of the treasurer.

Of receipts by counties, you will be interested in knowing that Crawford county is first with $1,304 paid in. Other large counties are Benton, Buena Vista, Boone, Cedar, Cherokee, Des Moines, Greene, Guthrie, Harrison, Ida—with $818, which was the second county—Iowa, Lyon, Montgomery, Marshall, Poweshiek, Pottawattamie—which was the third largest—Sac, Sioux, Tama and Warren. Those are the largest counties, contributing over $200 each.

The Chairman: The next will be the report of the treasurer.

The treasurer submitted his report, which corresponded with that of the secretary except as to a voucher for $18.30, which had not yet been presented to him for payment. His books showed a balance on hand from previous years of $3,189.76.

The Chairman: Is the auditing committee ready to report, Mr. Dawson?

AUDITING COMMITTEE'S REPORT.

Des Moines, Iowa, February 19, 1920.—To the Corn Belt Meat Producers' Association. Your committee having examined and audited the books of the secretary and treasurer, find the same to be accurately kept and to balance, except one voucher for $18.30, which was issued by the secretary and has not at this date reached the treasurer for payment.

W. P. DAWSON.
E. L. HILL.

Thursday Afternoon.

Convention reconvened at 1:30 o'clock p. m.

The Chairman: I am going to introduce to you Prof. O. G. Lloyd, of our State College of Agriculture, at Ames, who is going to talk to you on land values.

FARM LAND VALUES IN IOWA.

By O. G. Lloyd.

It is to the interest of all Iowans, and especially the rural population, to avoid unusual activity in the buying and selling of farm lands.

Speculation is regarded generally as a bad word. It is probable that very few people define it the same. There are, however, good speculators and bad speculators, long-time speculators and short-time speculators, legitimate speculators and illegitimate speculators. Those who are best acquainted with land speculation in Iowa last year, know of some bad, short-time, illegitimate speculation in farm lands.

Nearly every year during the past decade it has cost approximately one-half as much to rent land for cash as to own land and pay the mortgage rate of interest on its market price at the time. Those who bought during this period took the risk of land increasing in price sufficiently to make up the difference between the cash rental and mortgage rates and they have received more than the difference from the advance in the price of land.

Those who held land for this ten-year period not only obtained the benefits of the increase in the market price, but they planned for high crop yields, efficient organization and operation of the farm. These long-time plans resulted in larger annual returns than is possible where farms are always on the market for the highest price per acre and plans for the future are an impossibility. One class of farm owners may rightly be called good, long-time, legitimate speculators; the other class are bad, short-time speculators and often do an illegitimate business.

The unusual activity in buying and selling Iowa farms in 1919 suggested the importance of obtaining information relative to the extent of the increase in the price of Iowa farm land, the terms of sale and the persons engaged in buying and selling, the causes and effects of the increase in price, and the agencies which would promote farm ownership.

I. Unusual activity in buying and selling farms in 1919.

(A) Advance in price of land in 1919.

Table I gives the price of 1,414 farm sales by months from January to September, inclusive:

Month.	No. of Cases.	Av. Price per Acre.
January	21	231
February	34	263
March	72	226
April	120	240

May	244	238
June	382	247
July	367	255
August	158	259
September	16	276

These prices were obtained in fifty-seven Iowa counties which in 1910 had land values that were 7 per cent higher than the average of the state. Data from other sources which are representative of the state confirm the prices for August and September, but not for January and February. The Bureau of Crop Estimates' figure for March 1, 1919, is $192 per acre for the state, while the average price of these January, February and March sales is $240 per acre. It is probable that a higher percentage of good farms sold at the beginning than at the end of the advance, thus accounting for the difference between the actual sale price of these farms sold and the state average. High prices for extra good farms were soon interpreted as the price that was being paid for average farms and was one of the causes for raising the state average. In the early stages of the advance, the poorer grades of land did not sell easily, but during the period of the greatest activity in buying and selling which occurred later, many farms of the higher grades of land were taken off the market. This resulted in an increased percentage of low-grade farms which were sold in the last half of the period of the advance. It is safe to assume that land advanced approximately $75 per acre during the year and most of this increase was between March and September.

(B) Terms of sale.

Table II gives the per cent of purchase price paid at time of sale.

No. of Purchasers.	Per Cent Paid at Time of Sale.
140	2
631	5
29	50
17	100

The small cash payment at the time of sale encourages many to buy who cannot hope to pay for the land. Nearly 95 per cent of the buyers last year paid less than 5 per cent at the time of purchase.

Table III gives the per cent of purchase price paid March 1st:

No. of Purchasers	Per Cent to be Paid March 1, 1920.
53	0
865	1 or more
543	25 or more
150	50 or more

Nearly 95 per cent of the total sales involved March 1, 1920, settlement for about one-third of the purchase price.

Table IV gives the number of years to run of 701 first mortgages:

No. of Years.	No. of Cases.
Less than 5	81
5	246
6-9	80
10	241
More than 10	53

There is a strong tendency to make mortgages either for five or for ten years. Nearly 70 per cent of the first mortgages are about equally divided between these two periods.

Table V gives the rates of interest on 780 first mortgages:

No.	Rate of Interest.
1	4½
307	5
4	5¼
391	5½
1	5¾
76	6

Practically all mortgages are either for 5, 5½ or 6 per cent, with a predominance at 5½ per cent, closely followed by 5 per cent.

Table VI gives the number of years to run of ninety-seven second mortgages:

No. of Years.	No. of Cases.
Less than 5	26
5	17
6-9	15
10	28
More than 10	11

As in the case of first mortgages, five and ten years are the outstanding periods. The average duration for second mortgages is six and six-tenths years, as compared with seven and seven-tenths years for first mortgages.

Table VII gives the rates of interest on 173 second mortgages:

No. of Cases.	Rate of Interest.
31	5
56	5½
79	6
4	7
3	8

There seems to be a stronger tendency toward a 6 per cent rate than in the case of first mortgages. On the whole the rate of interest for second mortgages is not to a marked extent greater than for first mortgages.

There was a total of only eleven third mortgages and they do not differ materially from first and second mortgages in the number of years to run or the rate of interest.

A study of the terms of the loans indicates that on the whole they are not more liberal than was the practice before the recent advance in the price of land.

Practically 78 per cent of the cases involved cash payment of about half the purchase price. The average mortgage indebtedness incurred is 64 per cent of the sale price. Most of the mortgage indebtedness is contracted at rates of interest amounting to 5½ per cent with commissions, etc., of at least ½ per cent additional, whereas the ordinary rate employed in calculating labor income is 5 per cent.

(C) Persons engaged in buying and selling.

Farmers were more active as buyers than as sellers of farms. They comprise 65 per cent of the buying class and only 57 per cent of the selling class. On the other hand, retired farmers were very much more active as sellers than as buyers. The same tendency was true of real estate men. Bankers, merchants, and stock buyers purchased more extensively than they sold. Eighty-three per cent of the sales were made by three classes—farmers, retired farmers and real estate men—while nearly 80 per cent of the purchases were made by these classes.

Of the total of 988 cases in which the intentions of purchasers were indicated, practically two-thirds had purchased without intention of reselling, while a little more than one-fourth bought with the definite intention of reselling. About 10 per cent bought with the intention of reselling if possible, but with the expectation of operating or renting the farms in case they could not sell favorably.

Back of the immediate motive of selling at a good price there are special reasons for selling. Out of 919 cases, 30 per cent gave the desire to realize a speculative profit as the primary motive for selling. Twenty-one per cent assigned as the principal motive the desire to buy other farm property that suited them better than the farms they already owned. Nearly 5 per cent expressed the desire to reduce the holdings of farm land, but in a considerable number of cases it was the desire to take advantage of the high prices.

More than 27 per cent desired to retire from farming. The large increase in the price of land no doubt facilitated the tendency toward retirement from farming. Nearly 9 per cent of the sales were made for the purpose of settling or dividing estates or partnerships. There is also a small group of sales classed under financial difficulties.

II. Causes and effects of increase in price of farm lands.

(A) Probable changes in tenure of farm operators.

Of a total of 974 farms sold, 46 per cent were operated by owners, leaving 54 per cent to be operated by renters. This represents an increase of 13 per cent since 1915, when the state census was taken and the amount of tenancy was given as a little more than 41 per cent. This is probably true, however, that farms owned by retired farmers, real estate and other city dwellers, and therefore operated by tenants, were relatively more actively bought and sold than the farms occupied by their owners.

The declared intentions of the purchasers, however, indicate that probably about 36 per cent will be rented and the remaining 64 per cent will be operated by the purchasers. This leads to the conclusion that the recent activity has resulted in an unusually large proportion of farms falling into the hands of purchasers who intend to operate them personally. This result may be interpreted as due to the tendency of the non-farming owners of land to dispose of their holdings at the favorable prices prevailing during the recent period of activity, and to the fact that farmers, whether owners or renters, have been enabled to acquire a considerable portion of these holdings because of the agricultural prosperity of the last few years.

The relative increase in farms to be operated by owners, however, is only the immediate results of the recent advance in land. It does not indicate necessarily what will be the ultimate result with respect to the ratio of renters to owners operating their farms. It is entirely possible that if the existing high level of land prices continues, and particularly if a period of agricultural depression occurs, the tendency for renters to buy land will be greatly retarded and a large proportion of farms will fall again into the hands of absentee owners.

(B) Division of increment between different classes.

An analysis of the total increase in value from the sale of farm lands was made for 392 cases in twenty-two counties. The cases in which property was purchased since March 1, 1918, and the sales effected during the period of the recent advance, give a total increment of $1,036,582. Of this amount 69 per cent was received by dwellers in towns and 31 per cent went to dwellers in the country.

In addition to the increment appropriated by non-rural classes as a result of the recent advance in the price of land, there also must be reckoned the gains of real estate men in commissions on sales made. Of 945 sales, about 73 per cent were effected through an agent. The average percentage of agents' commissions on the value of sales for which records were obtained was 1.61 per cent. The generally prevailing rate for farm sales appears to have been $2 an acre.

(C) Farm earnings previous to increased price of land in 1919.

Table VIII shows the labor income and landlords' per cent on investment on Iowa farms:

Year.	Labor Income.	Landlord's Per Cent on Investment.
1918	*$2,656	4.07
1917	* 3,285	4.34
1916	* 1,659	3.12
1913	303	2.48
1915	370	3.95

*Selected farms.

Labor income or operators' wages is the amount left to pay the farmer for his own labor after allowing 5 per cent for the use of capital, pay for family labor and other farm expenses. In addition the operator and his family get the living furnished by the farm.

Landlord's per cent on investment is the net rent to the landlord after subtracting taxes, etc.

In 1913 the operator estimated his physical labor at about $300 and he received about this amount in labor income. The landlord received less than one-half the mortgage rate, but land was advancing in price sufficiently to make up the difference.

In 1915 when another big survey was made, the operator and the landlord were getting higher returns. The data for 1916, 1917 and 1918 were taken from selected farms which in 1918 made twice the labor income of the average farm. It is probable that the landlord's per cent on these selected farms is also higher than the average.

Data for the average Iowa farm shows that in 1918, according to the farmer's own estimate of the value of his labor, it was greater than his labor income of $1,124. If the labor income had been figured on the basis of land prices August 15, 1919, instead of March 1, 1918, each farm operator would have received only $150 for his labor. It is probable that 1918 was a more profitable year than the average from 1916 to 1919, inclusive.

(D) Comparison of index of prices of farm products and of farm lands.

Table IX gives the index prices of farm products and of land. (100 equals average five years 1910-14):

Year.	U. S. Prices of Crops and Live Stock.	Price of Iowa Land.
1919	432	239
1918	214	137
1917	178	125
1916	121	120
1915	102	116

Comparing prices of farm products with prices of Iowa land indicate land was relatively high in 1915 and in 1919. It appears that land was capitalized in 1919 at the price farm products were selling for at the time. If war prices for farm products continue, the war price for farm land is not too high. It is probable, however, that peace prices of farm products will be lower than war prices and many farm purchasers will find it increasingly difficult to pay for land from the returns of farm products sold at peace prices. Labor income and value of operator's labor indicate cost of production has increased in the same proportion as the prices of farm products and the prices of land. The more complete and efficient use of land, labor and equipment will tend to lower the cost of producing farm products and result in a larger surplus to be applied in paying off interest and principal. Unless cost of production is reduced through improved farming methods many farms will probably go back to the previous owners.

(E) Psychology of farm land values.

Table X gives the price of Iowa farm land from 1850 to 1919:

Year.	Price per Acre.	Year.	Price per Acre.
1850	$ 6	1910	$ 96
1860	12	1915	134
1870	20	1916	153
1880	23	1917	156
1890	28	1918	174
1900	43	1919	192

The data from 1850-1910 is from the federal census, and from 1915-1919 from the Bureau of Crop Estimates. The price per acre obtained from these two sources is not entirely comparable with each other, but indicates the trend land prices have taken in nearly seventy years. During this time land has never gone down in price and during the past generation it has advanced rapidly. Iowans believe the land is going higher, that it can never be bought cheaper than the present. They buy, therefore, to avoid paying a higher price later on. They say there is but one corn belt to grow corn and hogs and the demand for these products is increasing. They believe in Iowa and assert the fact that Iowa has never had a complete crop failure, etc. This general attitude of optimism toward land increasing in value is partly responsible for its present price.

(F) Influence of net worth on farm land prices.

Table XI shows the purchasing power of 204 farmers who reported in 1914:

Years Owner	Age of Operator.	Net Worth.
2	38	$21,170
7	43	29,121
12	46	38,631
25	55	50,679

There are two classes of buyers: First, those who will not buy land if they believe the annual returns will not pay them a mortgage rate of interest on the investment and pay for their labor; second, those whose net worth permits them to buy land for a home because it "just suits them," regardless of the returns on the investment.

The latter class is responsible for land selling so high in price that its annual returns will not pay for it. This class does not figure in per cents before buying—they want a farm and they buy regardless of the price.

The volume of business done by this class and its effect on the price of Iowa land is evidenced by the fact that on March 1, 1919, the average net worth of the average Iowa owner-operator was approximately $40,000.

What farm land will sell for is influenced quite as much by farm savings as by farm earnings. Iowa farmers have been saving and they believe land is a good investment as a home as well as a place of business.

(G) Opinions from representative groups concerning farm land values.

(a) County agents.

About forty Iowa county agents reported that 60 per cent of the farm purchasers in their respective counties intended to farm and 40 per cent bought for purely speculative reasons.

These five causes for a rise in land prices were given in the order of their importance:

1. Speculation.
2. Prices of food products.
3. Returns high as compared with other investments.
4. Home.
5. Never lost on investment.

Two-thirds reported that the price is justified and 80 per cent reported land as high now as August 15th but is quiet.

A typical county agent's report.

This county agent's report is a little more complete and more optimistic than the average. These are his reasons for thinking the price of land justified:

"1. Cheap money. It is not likely that the value of money will change much in the next few years. If it does this world will see some sorry times and good land would be the best security. These tremendous debts of the war will be paid with cheap money and this is the principal reason why the value of land will remain where it is.

"2. There is plenty of money in the corn belt and there is no reason why it should become scarce immediately. The farmers and men who bought land have just as much money now and will have in a year from now as they had when this land was purchased.

"3. People are beginning to realize the home and social value as well as the productive value of corn belt land. Land has not been going up during the period of the war and some advance was naturally to be expected. The war focused attention to the real productive land of the world. The simple fact is that we produced enough food here for the world to win the war.

"4. There is no more corn belt land and very little of any kind of land to be brought under cultivation, while population is steadily on the increase.

"5. Better farming. Instead of farming $200 land in a $200 way with a $200 man, we will farm $500 land in a $500 way with a $500 man.

"Now you will notice that I have not taken into consideration any of the conditions due to the war, shortage of food, war prices, etc. They are only of temporary effect."

(b) Farm owners.

Farmers who bought land last summer in these same counties gave the following reasons in the order of their importance for buying land:

1. Close to town, school, church, market, a home.
2. Land will pay a fair rate of interest.
3. Fertile farm.
4. Good investment.
5. Needed more land to keep boys on the farm.
6. Speculation.

It should be noted that a farm owner is a bull on the market. Altho his farm may not be for sale he is generally optimistic that the price will maintain or go higher. The county agent put speculation as the first cause for the advance in the price of land, the farmers placed five other causes as more important.

A typical farmer's report. Reasons given for land selling at present prices.

J. C. T., age 25, inheritance nothing, net worth March 1st, $25,000.

"1. Farmers are paying present prices for land because money has been piling up at tremendous rate during the past four years, with corn at approximately $1.50 per bushel and hogs at 15 cents per pound, while all the land advance has come in one year.

"2. I believe 25 per cent of the advance in land prices was due to speculation.

"3. A good farmer can buy this land at $350 (present market price) and pay for it with $1 corn and 10-cent hogs.

"4. Farmer will pay more to get farm for son or son-in-law.

"5. One must figure that the farmer gets a home as well as a place of business.

"6. As farm equipment and labor advance in price the better land is worth relatively more. Except for husking it is not more expensive to produce sixty bushels of corn per acre than to produce thirty bushels.

"7. More food produced per man now than formerly. The three-bottom plow has replaced the one-bottom plow. Pork is produced more economically with scientific rations, self-feeders and hogging down. Beef is produced more economically with ensilage and protein supplement, oil meal or cotton seed with it.

"8. Farmers have made money in this neighborhood and would rather put it in farms than in oil stock or other similar investments.

"9. More than one-half of those who bought farms in this community are between 25 and 40, who have made good money the last four years and have bought farms to keep them.

"10. Advantage from boom is that men have been able to sell and buy where they liked the neighborhood and farm better."

Note: Last May he shipped ten loads of cattle and hogs. The year before he shipped eight loads of cattle and seven loads of hogs.

(c) Bankers.

Generally speaking, bankers were optimistic that the price of land would be maintained or would advance. They believed the present price for farm products will continue for a few years. They thought it unwise, however, for an average man to buy a farm at present prices unless he had approximately one-third or more of the purchase price.

A typical banker's reply concerning land prices:

"1. Prices of farm products will not go back to former levels. Population will increase faster than production.

"2. Only one Iowa or one corn belt.

"3. Land will advance sooner or later, some day to $700 or $800 per acre for best farm land.

"4. Farmers pay more than land is worth to farm if they are buying it for a home.

"5. A higher per cent now probably find it necessary to provide sons with farms.

"6. One reason for land advancing in price is the decreasing percentage of waste land to total farm area.

"7. Due to soil, climatic conditions and diversified farming, there are not any complete crop failures in Iowa.

"8. Farm buildings at present are built more for permanency and convenience and add to the value of land."

III. Agencies to promote farm ownership.

Unusual activity in buying and selling farm lands increase the uncertainty of renter's tenure on the same farm and increase the difficulty of becoming farm owners.

Uncertainty of tenure prevents the renter planning ahead. He must be ready to move and cannot afford to be handicapped by having much live stock or feed and supplies on hand at moving time. The only thing the renter is certain of is the present, so he exploits the farm for present returns in his efforts to make up for lost opportunities in not being able to plan ahead.

In 1919 the increase in the value of an average Iowa farm was considerably more than the average renter's savings for the same period. At the beginning of the year, the renter was nearer ownership than at the end of the year. Postponing ownership is another way of expressing increase in farm tenancy. The danger lies in postponing ownership so late in life that a renter will lose hope, "give up" and not try to become a farm owner.

The ideal land tenure is each farmer tilling his soil. Farm operators, however, are of all ages. The boy who hopes to be an owner of an Iowa farm should climb the agricultural ladder. It is to his interest to do so and also to the interest of society. As he acquires experience and capital, he climbs the ladder from farm hand to renter and from renter to owner.

The two essentials needed in acquiring ownership, in a reasonable time, are supervision and capital. The state is performing an important service if it furnishes and develops agencies which supply these essentials.

During the past generation the significance of farm ownership has changed. Twenty-five years ago the Iowa farm owner and his family were forced to work long hours to make a comfortable living. Today the use of his farm capital gives him an income in the form of rent for which he and his family do not work.

Profitable Iowa farms require an average investment of more than $40,000. Average renters in two Iowa counties last year had a net worth of over $11,000. They may be termed financially independent, yet they were a long way off from owning an average Iowa farm.

It is folly to expect renters to become owners as early in life now as was the case a generation ago. Yet if ownership is postponed at the same rate that farm lands increase in value, most of the farms will be rented. A generation ago farm ownership was acquired at 30 years of age; in 1914 it was acquired at 35 years of age. Iowa farm land has advanced in price about 100 per cent since 1914 and it is probable the age of acquiring ownership is near 40 years of age.

Two agencies which will promote ownership are the stock-share lease and state farm credit. The former will shorten the period of tenancy by increasing the labor income, the latter will shorten the period of tenancy by extending more credit to the individual, which will enable him to buy a farm earlier.

STOCK SHARE LEASE AND AGREEMENT.

Three important considerations on the average rented farm are co-operation between land owner and renter, adequate capital to equip and operate the farm and capable supervision of the farm business.

The stock-share method of renting supplies these three needs better than any other method of renting. Co-operation is secured by the land owner and renter forming a company and dividing the net receipts equally. The land owner supplies the renter with the capital and credit he needs. The land owner takes less risk than other creditors for he retains part of the supervision of the farm. The renter looks after the production end while the land owner gives special attention to buying and selling, or the marketing end.

Table XII shows the correlation of method of renting to farm organization in southern Iowa in 1915:

Method of Renting.	Average Farm Capital.	Average No. of Animal Units per 100 Acres*	Average per cent Receipts from Crops.
Stock-share	$33,163	25	16
Cash	18,204	15	26
Grain	17,993	15	48

*The equivalent of a 1,000-pound animal kept on the farm twelve months.

The stock-share rented farms have the largest business as shown by capital, number of animals kept and per cent of total receipts which come from sale of crops. Most of the crops raised are fed on stock-share farms, while 48 per cent of the total receipts on grain-rent farms come from the sale of crops. The effect of type of farming on soil fertility and farm profits are shown in the following table:

Table XIII shows the correlation of method of renting to crop yields and profits in southern Iowa in 1915:

Method Renting.	Average Yield of Corn.	Average Tenant's Labor Income.	Landlord's per cent on Investment.
Stock-share	40	$921	3.85
Cash	36	669	2.95
Grain	35	661	4.65

The yield of corn per acre and the tenant's labor income are the largest on stock-share rented farms. The 300 records used in this study are for the crop year 1915, when crop prices were relatively high compared to live stock prices. The grain-rent landlords who sold half of their crops received a higher rate on their investment than other landlords. No account has been taken of the difference in the amount of fertility lost by selling crops compared to feeding them. Studies made in Iowa since 1910 show that live stock farming generally pays the highest present returns and insures the highest future returns by maintaining crop yields. Labor and equipment are more fully utilized on live stock farms and a better grade of hired help is usually obtained when employment can be given throughout the year.

Many young men who are struggling along with inadequate capital and inexperience in buying and selling farm products should change either from grain or cash rent to the stock-share method. There are many capable landlords who have rented their farms for grain or cash rent who have nothing to do in town. If they would change to the stock-share plan, they would find profitable and pleasurable employment in helping to manage their farm business.

It is proper that the younger man should assume the responsibility of raising and feeding the crops. This leaves the landlord free to take care of the marketing end. By co-operating with the tenant, the landlord will forget his grouch and will be a far better citizen in promoting the interest of the town as well as the country.

STATE FARM CREDIT.

Iowa has an exceptional opportunity of furnishing adequate farm credit. An Iowa farm loan bank can furnish this need better than any credit institution which is making loans within the state. Iowa is rightly called "the paradise of the farm loan business." With 96 per cent of the area of the state in farms and 86 per cent of the farm land improved the volume of business is tremendous.

Farm credit should be easily obtained at low interest rates. The average size of the Iowa farm is about 160 acres and the market price is $250 per acre or more. This gives a total valuation of $40,000 per farm. It requires little more expense to a loan company to make a $30,000 loan than a $1,000 loan. The larger the average loan the lower the cost of handling each unit of business.

The risk of foreclosure is less in Iowa than in other states. Soil, climate and market facilities require diversified farming to obtain the largest net returns from farming. The average Iowa farmer has three or more sources of income and a complete failure is unknown.

The Federal Land Bank of Omaha does a loan business in the eighth district, which comprises Iowa, Nebraska, South Dakota and Wyoming. All receipts and expenses in the four states determine the rate that is charged in each state. The wheat farmer in western Nebraska or Wyoming gets a farm loan at the same rate as an Iowa farmer. A Wyoming farmer with less than twenty inches of rainfall may live twenty-five miles from a railroad and he may wish to borrow $1,000 to pay for his wheat farm. The Iowa farmer must bear part of these excessive expenses of making the loan and bear his proportionate share of the loss in case the farm mortgage is foreclosed.

The Federal Land Bank is making farm loans in Wyoming at a much lower rate of interest than private capital has charged. Is there any reason why Iowa should pay a higher interest rate in order to lower the rate in other states? The Federal Land Bank is doing a big business in Iowa and on the whole is providing more satisfactory farm credit than any other loan institution doing business in the state.

In South Dakota the Federal Land Bank is not doing as large a business as in Iowa. In South Dakota the risk is greater, the average loan smaller, and loans are made at the same rate as in Iowa. But, a state farm loan bank has taken most of the business, and a similar institution, modified to meet Iowa conditions, would gradually get the business in Iowa.

This land bank of the sister state is known as the South Dakota Rural Credit. The rural credit commissioner believes most people do not know what rural credit means and suggests South Dakota Loan Bank.

Farm Loan Bank of Iowa would be entirely expressive for an institution in this state. No attempt will be made to give any of the details of organization and operation of this proposed institution. The following letter dated January 20, 1920, from the rural credit commissioner, gives some idea of what is being done in South Dakota:

"Your letter of 16th inst. was duly received, and in reply would say that the writer is not familiar enough with general conditions in Iowa to venture an opinion as to any modifications in our rural credit law, necessary to make it applicable to the state of Iowa. I suppose that on account of the uniformity of values in your state that the limiting factor as to the assessed valuation, would not be necessary, while this feature has been found very valuable and useful in this state, where there is a wide variation in the assessed valuation.

"Answering your inquiry as to what is meant by 70 per cent of the value of the land, would say that this means the land only, and not including the buildings. Our law provides that this board can loan 70 per cent of the value of the land, plus 40 per cent of the insurable value of the buildings, provided, however, that the buildings shall not be considered as worth more than $5,000.

"In our pamphlet this is quite fully explained, and an example is given of how it operates. We think of no anticipated change of our law, except that the maximum amount which can be loaned to any one borrower will probably be raised at the next session of our legislature, as there is a large and reasonable demand for larger loans than we can now make, under the law.

"The system has proved tremendously successful and has far exceeded the most sanguine expectation of its promoters. Our first loan was closed October, 1917, and up till last night we had closed 4,963 loans for a total of over $20,000,000, all at 5½ per cent on thirty years' amortized payments.

"Of these loans about 2,000 have had their first and second annual payments mature, and of this number only thirty-nine, to this date, are delinquent in their payment, and of these thirty-nine, only thirteen are delinquent prior to December 1st last, and this is quite remarkable.

"When the law was first adopted it was believed that local banks and real estate mortgage brokers would oppose it, but it is found that the banks now are generally in favor of it, and are quite generally assisting their clients in procuring loans through this board.

"On the other hand, real estate mortgage companies have suffered a noticeable loss of business by reason of our operations, especially in the western part of the state where mortgage loan 'sharks' have been exploited and traded upon the needs of the farmers and ranchers of that region."

It should be noted that the plan for rural credit was under way before the federal land bank act was enacted. "Because of the simplicity of the proceeding and the quick action, and the fact that there is no joint liability and no stock subscription, we seem to be securing an apparent advantage over the federal plan."

The system of rural credits was established "for the purpose of fostering and encouraging agriculture, dairying and live stock raising in the state of South Dakota and the development and improvement of farm lands."

A South Dakota rural credits board "shall consist of five members, one of whom shall be the governor of the state, and four members appointed by the governor."

"The board may lend money on, and take security for same, farm lands, subjected to liens or assessments for drainage, reclamation or irrigation purposes, payable in installments, not due at the time of making such loan, and the mortgage taken to secure the loan shall, notwithstanding said liens or assessments, be deemed a first mortgage within the meaning of this act, provided, however, that the amount of said liens or assessments shall be considered by the board in determining the amount to be loaned on such farm lands.

"Such loans may be made for the following purposes and no other:

"(a) To provide for the purchase of farm land;

"(b) To provide for the purchase of equipment, fertilizers and live stock necessary for the proper and reasonable operation of the mortgaged farm land, the term 'equipment' to be defined by the board.

"(c) To provide for the buildings and other improvements of farm lands; the term 'improvements' to be defined by the board.

"(d) To liquidate indebtedness of the owner of the land mortgaged existing at the time of the organization of said board or indebtedness subsequently incurred for purposes mentioned in this section.

"No such loan shall exceed seventy (70) per cent of the value of the land as ascertained and fixed by the board, plus forty (40) per cent of the insured value of the improvements; provided, that for the purpose of this act the value of the improvements shall in no case exceed fifty (50) per cent of the valne of the land; and provided, further, that in no case shall any farm improvements be considered worth more than five thousand dollars ($5,000). In no case shall a loan be made in excess of the average assessed valuation for the three preceding years as ascertained from the county auditor in the county where the land is situated. The board shall require that the property be appraised by competent agents and in no event shall a loan be made except upon the approval of the board.

"A majority of the board shall constitute a quorum, but no loan shall be made except upon the affirmative vote of three (3) members, and the records of the meeting shall show which members voted to approve the loan.

"A reappraisement may be permitted at any time in the discretion of the board and such additional loan may be granted as such reappraisal may warrant under the provisions of this section. Whenever the amount of the loan applied for exceeds the amount herein limited, such loan may be granted to the amount permitted under the terms of this section, without requiring a new application or appraisal.

"No such loan shall be made to any person who is not at the time, or shortly to become, engaged in the cultivation and development of the farm land mortgaged. In case of the sale of the mortgaged land the board may permit said mortgage of the vendor to be assumed by the purchaser or by the heirs of the deceased mortgagor.

"The amount of loans to any one borrower shall never exceed a maximum sum of ten thousand dollars ($10,000), nor shall any loan be for a less sum than five hundred dollars ($500)."

Experience in the South Dakota rural credit has furnished many valuable suggestions for improving it. Iowa will have the benefit of the experience of South Dakota and other states in working out a system of farm land credit which will meet the particular needs of the state.

The Chairman: I am going to announce the committee on resolutions at this time. The committee on resolutions is: W. P. Dawson, chairman, Cherokee county; Harry B. Fox, Sac county; George Morse, Iowa county; A. O. Anderson, Lyon county; Warren B. Nichols, Pottawattamie county; Fletcher McCormick, Poweshiek county.

Mr. White: I make a motion right here that all resolutions be referred to the committee without first presenting them on the floor of the convention.

Voices: Second the motion.

The Chairman: I believe that is all, and we will proceed to our next number on the program, which is a talk on cattle feeding experiences by Mr. Charles Cessna, of Grinnell.

CATTLE FEEDING EXPERIENCES.

By Charles Cessna.

I was invited a few weeks ago to address this meeting on cattle feeding. And I want to say that I consider it some job to talk on that subject before this body of cattlemen. Nevertheless, I will attempt to do the best I can.

Now, gentlemen, I want to outline my experiences, and I don't know whether it will be in line with the experiences of the rest of you or not. The average cattle feeder spends five or six months of the year growing various crops, and when he gets ready to buy his feeders, after he is through threshing or cutting corn or filling his silo or husking corn, he goes to market to get his cattle. A good many here will bear me out in this assertion that nine out of ten of them spend only one day buying feeding cattle when going to the various markets. He goes with the intention of buying one kind of weight or another, and if he doesn't find just what suits him after an hour or two, and it is quitting time, he turns in and buys the next thing he sees. The average man spends from five to fifty thousand dollars in feeding cattle during the past few years, and I don't think he gives the cattle-buying business the time that he should. In fact, I know they don't in our country.

Now, we find also that during the fall season the cattle market fluctuates, especially the feeding market. I have known in extreme cases fluctuations as much as two dollars a week. The man that goes to the market once a year, unless he watches the markets carefully, doesn't get the benefit of that. I can cite several cases during the last year. For instance, I was in Kansas City one week and I bought good cattle weighing 1,050 pounds for 9½c; I bought some other cattle weighing 940 pounds at 9¾c; I bought some fair Kansas native cattle at $8.40 and $8.50, and the next week I paid $9.25 and $9.50 for the same stock that I had paid $8.40 and $8.50 the week before. The man that goes to the market only one week a year doesn't realize the fluctuations in the market; he doesn't realize that there is as much change in the market as there is, and I think it is due to all of us to give the market attention so that when we get ready to buy cattle we give it consideration and spend more time. We spend five or six months growing the crop and then spend only one day to buy cattle to feed your own feed and frequently a considerable portion of your neighbor's.

There is another thing we want to bear in mind when we go to market to buy cattle, and that is that we are dealing with the best talent in the country, and if a man is not posted it's a question whether he buys cattle worth the money or not.

I found another thing in regard to getting cattle from different territories. For instance, the last two years in our locality we bought a great many cattle that came from Canada, and we found during the warm weather that they don't do very well—they don't make good gains. They were apparently well-bred cattle, but they didn't do well in warm weather. But they did do very well in the winter months. Another experience

I have had—you take fleshy cattle from the western states, it doesn't matter whether they come from Nebraska, South Dakota or Kansas, or where it is, but cattle off of what we call the long wild grass, don't come to Iowa and do well on our blue grass in the middle of the summer, but I have learned from long experience that cattle off of the short grass from farther west, in the plains country, have always done well for me That has been my experience in the last twenty-five years. But I found that the cattle off of the long grass, if fed grain, will do very well. I know of a man that bought some cattle last spring, shipped in April, that came from a wonderful country; they had as good a pasture as was in Poweshiek county, or any other county, and they made only about 100 pounds gain during the summer. They were cattle that came from near the Canadian line.

There is another thing I found in my experience that I thought I would mention here, and that is with regard to changing cattle from ensilage to dry feed. If cattle are being fed ensilage and practically nothing else, a change to dry feed is very bad for them, in my experience; but if they have been fed ensilage once a day and corn once a day, they seem to take to dry feed pretty well. But take cattle that have ensilage and nothing else, they don't do well—as well as cattle that have been fed on other feed. In saying this I don't want you to think I am condemning ensilage, but I think it is better to keep them on their regular ration until they are ready for market.

Voice: You are feeding something with the ensilage, are you not?

Mr. Cessna: Yes. Now there is another question. There are a lot of old-time feeders here, and we are altogether feeding more or less western cattle. From my experience, my advice is if a man is feeding western cattle, put a sign on your gate: "No strangers admitted," and you will find that you will get better results.

Voice: And no dogs allowed.

Mr. Cessna: Yes, keep the dogs away. Any man knows that anything that disturbs the cattle makes them restless and they get up and move around, and that means that half of the gain for that day is lost.

How to remedy this buying of feeding cattle, of getting on the market at the right time, is a matter I can't help you in, but I know one thing, if you study the market closer, if you make up your mind to buy cattle on September 1st, watch market conditions from August 15th. If you find on September 1st, the day that you had made up your mind to buy cattle, that the market is too high, wait fifteen days, or thirty days, or, if necessary, two months. If we had done that this year, we would all of us be a lot better off.

Voice: If we had waited six months, we would be still better off. (Laughter.)

Mr. Cessna: I bought one load of cattle that weighed 1,193 pounds, for Bill Hazard, and they cost $10.60 at Kansas City. He fed those cattle seventy days, and they showed three pounds a day between Kansas City and Chicago.

Voice: He fed them how long?

Mr. Cessna: Seventy days.

Voice: What did he feed?

Mr. Cessna: Ensilage and corn.

I have handled cattle many years, most of them out of the stock yards at Kansas City or Sioux City, and some other yards, and I have bought cattle for many feeders, but I have never, to my knowledge, had a complaint. I always buy cattle that I think are of the right kind and weight, because if you buy a steer with a fifty-pound fill in it and then take it home and weigh it and find that it is from fifty to seventy-five pounds short, the feeder thinks that somebody has robbed him.

There is another matter I want to speak about with regard to shrinkage. You buy a bunch of cattle today, you buy them to speculate on, not just what you want for yourself, and you take those cattle and feed them all the hay they want to eat that night and give them all the water they want to drink, and in spite of that I have had them lose all the way from twenty pounds a head to a gain of fifty-seven pounds a head. That's an illustration of the difference between buying them empty or full. If your cattle are empty, you get some weight next day, and if they are full you get shrinkage.

Voice: I would like to know if these cattle are filled after they are sold?

Mr. Cessna: I think I can explain that to you. I have bought cattle from speculators in Omaha and other places; for instance, they might buy them at noon today, and they will say: "Here's a bunch of cattle, and I'll transfer the weight to you at just what I paid for them." The speculator may have had those cattle an hour or two hours—there's one hundred head of them—and they are jammed into a pen and they have no chance to eat or drink. He takes them and cuts them into three or four pens and they line up at the bunker and eat hay, and drink their fill at the trough, and if they are there an hour, it's a safe proposition to transfer the weight. If you find a bunch of cattle lined up around the tough eating hay and drinking water, let him transfer the weight. But if they are standing around not eating or drinking, it's a good idea to re-weigh them. I bought a bunch of one hundred head of cattle when the market was kind of draggy, and a speculator said: "Here is a bunch of cattle for you; just what you want!" And they were all in four pens, and he priced them to me at—I forget the price now, but he wanted to transfer the weight. I went up and took in the situation, and then when he got up there and took in the situation, he forgot to talk any more about transferring the weight—he said, "I'll re-weigh them," and I didn't want to, and he finally said, "I'll re-weigh them anyhow," and I said, "No, your weight is good enough for me, I'll take them that way." He said, "Suppose they shrink, I'll stand it." And so we got them out into an alley and he cut them up into three bunches and weighed them, and I had 1,608 pounds. The cattle had been in the yards an hour and forty-five minutes, and that amounted to sixteen or seventeen pounds to the head in an hour and forty-five minutes.

The Chairman: Now, the next number on the program is a talk on live stock prices, by Henry A. Wallace. As many of you know, Mr. Wallace is associate editor of Wallaces' Farmer. I am sure Mr. Wallace has got something that we will all be interested in hearing, because he has more data on live stock prices covering the past forty or fifty years than any other man in this country.

LIVE STOCK PRICES.

By Henry A. Wallace, Associate Editor Wallaces' Farmer.

Mr. Chairman and Gentlemen of the Corn Belt Meat Producers' Association: It has been about four years since I had the pleasure of talking to you gentlemen. At that time hogs were about $6.40 a hundred at Chicago and cattle eight or nine dollars a hundred. At that time I showed you a chart describing the loss period through which you were going, of which you were painfully aware without any charts to convince you of it. I ventured the prediction that a good time was coming to us. Of course, prices went up higher than any of us had any right to anticipate, for we had the $23 hog and $21 cattle; but since then a lot of water has flowed under the bridge and conditions have again changed tremendously.

I was in Chicago last November attending a meeting of farm economists. After the meeting was over there were nine of us seated about a table in the dining room of the Auditorium Hotel, and out of a spirit of curiosity I asked them to make an estimate as to what the price level of 1926 would be as compared with 1914. Would it be 10 per cent over, 20 per cent, or 100 per cent over the 1914 live stock level? Of course they hesitated a little, but I finally induced them to write an estimate on a piece of paper and they handed them in to me. I'll tell you what they estimated. But first I'll ask you all to set in your own mind as to what the price level will be six years from now. Will it be 10 per cent over 1914—the price before the war—or will it be 50 per cent over? Just set a price in your own mind; I'll not ask you to put it on paper. I asked my father this morning the same question, and he seemed somewhat indignant as to why I should ask that question; he seemed to think it was foolish. (Laughter.) Finally I told him that I had got nine economists to answer it, and he gave me his opinion. If you all have a figure in mind, I'll say that these nine gentlemen in Chicago varied all the way from 20 per cent over 1914 to 65 per cent over. My father, by the way, estimated 25 per cent over 1914; my own estimate was 60 per cent over 1914, so that you see there was a considerable difference of opinion in our own family. I also asked them at that time what the price would be next May—that was in November—and six of them thought that the price level next May would be 15 per cent below what it was at that time; one had as low as 40 per cent under what it was last November. As a matter of fact the price level right now is 9 per cent over last November, with every prospect that by May it will be 10 per cent over.

In this connection I want to call your attention to industrial commodities to show you how they have gone up since 1914 in comparison to farm products. Crude petroleum in 1914 was $1.75 per barrel. It is now $5.50. This is an increase of 215 per cent. Pig iron was $10.25 a ton back in 1914, and is now $40. It has nearly quadrupled in price—390 per cent. Coke, which is used very extensively in the manufacture of pig iron and other industrial commodities in the east, cost $1.90 a ton in 1914, but has now advanced to $6. Print cloth has advanced from 3¾c a yard back in 1914 to 16½c. Copper, which has advanced less than other metals, is now 19¾c, as compared to 13½c in 1914. Copper agrees more nearly with cattle and hogs than any other industrial commodity. The average price of all these industrial commodities is just about three times the 1914 level.

Take the corn prices and compare them with 1914. The price today is $1.47, as compared with 69c in 1914 before the war broke out. Thirteen-hundred-pound steers on the Chicago market are $14, as compared to $9 in 1914—an increase of 55 per cent. Butter has doubled; but you take all of your agricultural products together and they have on an average doubled, as compared with industrial commodities which are just about three times the 1914 level. Wages in New York factories are 154 per cent higher—more than doubled over the price in 1914. Farm hand wages—we think they have gone up, but they haven't quite doubled. You may think they are high enough, but you must remember that your own wages are to a large extent set by the wages paid your farm hands.

Bank clearings, which are a great index of industrial conditions, have increased 154 per cent—a little more than doubled. Before I get into the main part of my subject I would like to say a few words on the general cattle situation. I just finished preparing for Wallaces' Farmer a chart in which I transfer cattle values onto the basis of what they will buy. What will cattle buy now in terms of all other commodities, as compared with what they used to buy? As a matter of fact we find that cattle today are in the "depths of despondency;" they correspond to what existed in 1908-9—we had a similar situation along there. I am not referring just now to the feeding game so much as I am to the breeding game. There was a situation such as this in the early 1900's. We were in the lap of prosperity in 1912, 1913, 1914 and 1915. Cattle then would buy more than usual of other commodities, but now we are sliding down into a depression period. We have more cattle than we ought to have, for me have more cattle than we can sell at a profitable price.

Member: I would like to ask—I watched the wholesale price of beef on the Chicago market pretty close and saw such things as these: Cattle that sell for about 13c have beef loins which sell for 55c and remain stationary right there. They don't go up and down at all, but stay at 55c, and 40c for the ribs, and in the cheapest part of the beef they are 12½c. That shows that the beef men are not getting value of the stuff they sell. It is not a question of what it is worth in the shape of cattle, but what it is worth to the consumer.

The Chairman: Just a word, gentlemen: Don't let's work this off into a kind of running-fire discussion. It is unfair to the speaker; it disconnects the thought of the speaker to put in your questions when he is speaking. Now, let's let Mr. Wallace finish and then take up those questions in a formal discussion for a few minutes. I think that is proper. Let Mr. Wallace finish and then take up the general discussion.

Mr. Wallace: I have been very much interested in Mr. Browning's discussion, for it brings up a point I had in mind. I don't know whether his figures conclusively prove that the packers and retailers are taking down an excessive profit, but I will admit that they may possibly be doing so. I do not think that any one is in position just now to prove it, but I do think it would be a fine thing to have agencies to collect figures over a long period of time and figure the normal margins of profit and to see whether or not they are unjustified. If you will permit a few remarks on the general outlook as to the price level: I do not venture anything absolutely definite. I do wish to say this, however, that in my opinion the price level is not coming down as fast as a lot of you think; the reason being that this was really a tremendous disturbance; it was not like the civil war—the war that we just went through. Back at the time of the civil war prices were awfully high from 1865 to 1873, and then they went down pretty badly until about 1896. They went down largely at that time due to the fact that prices were quoted in greenbacks, and it took $1.50 in greenbacks to buy one dollar in gold. Now, however, in the United States we are on a straight gold basis and we don't have to get down to that basis as we did before. In England today they have to pay $1.50 in money to get a dollar in gold, and in France they have to pay $2 in money to get one dollar in gold; but in this country our prices are legitimate because our money is good, and in the exchange market the other countries recognize that. In England and France today they are paying a large premium on the American dollar because their money is to a large extent a paper money, and as a consequence their prices are very high. England and France cannot deflate their currency at once, because they would precipitate disaster the moment they tried to do it. In 1869 in this country they tried to deflate, but with such disastrous results that they had to stop it, and we were not able to undertake it seriously until along in the '70's. I don't think France and England will attempt any serious deflation within the next five or ten years. I will also venture the opinion that the exchange rate will be against them for at least five or ten years. That is, their money will not be on a parity with ours for five or ten years. They will use this as a "bear" argument for a long time to bring down our farm products, but I don't think they will get very far with it. I will sum up by saying that prices will be higher than a lot of people think, possibly for twenty years, but at the same time there are likely to be very serious crises so far as the farmer is concerned for two or three years at a time, when he will get it in the neck. This is more or less introductory.

I was going to talk about some phases of economics, and I am going to apologize for economics by saying that it is a dry subject. Economics has been a sort of dead language, in my opinion, for the past fifty years. Economics was founded by Adam Smith about 150 years ago, and at that time it was about the livest thing there was. People in that day enjoyed reading Adam Smith, but, as I say, in the course of time it became more or less of a dead language. Now, however, under the influence of war conditions, economics has been waked up from its Rip Van Winkle sleep. People are living under new conditions and they demand a new economics to interpret these conditions.

About 150 years ago a man by the name of Watt invented the steam engine, and another fellow named Stevenson invented the railroad, and then somebody else learned how to apply power machinery to spinning and weaving. Before that people lived along generation after generation, century after century, under practically the same conditions. Population was stationary. Wheat produced eight or nine bushels to the acre. Then along came McCormick with his reaper and farm conditions changed rapidly. Prior to the advent of McCormick's reaper, it took three hours of manual labor to produce a bushel of wheat, while now it takes ten minutes. Fewer people could do more work on the farms and millions were released to the cities. Then in rapid order followed the use of petroleum, coal, electricity; and civilization, like a snowball rolling down hill, gained momentum from its own weight. Thus our civilization came of a sudden, and we soon had railroads, steamships, telephone, telegraph, wireless telegraphy, automobiles, airships, and we now don't know how much farther we are going with it. Physicists tell us that we are on the verge of discoveries which will make all that has gone before seem like child's play. But in the midst of all these changes we still continue to hold onto the economics of Adam Smith; the economists devised to get the situation of 150 years ago when there were large numbers of small units of business freely competing with one another, where supply and demand had full and free play. But this is not so well adapted to this present day. Today the farmer is the only business man whose produce is marketed in small units and under free competition. Supply and demand works then in setting the price he will receive for his produce, but when he buys on the market, he buys commodities on a closed market where free competition does not enter.

With this introduction, I want to talk on the three price-making forces. The first of these price-making forces is our old-time friend, supply and demand. Whenever you sell a load of hogs at a disadvantage in the Chicago market and complain about it, the packers and commission men will tell you that the price is low on that day due to supply and demand, and they regard that as an all-sufficient explanation. As a matter of fact, that reply is an insult to our intelligence. If you see an airplane hurtling across the sky and you ask what it is that permits it to stay aloft, and they answer, "The law of gravitation," you will not be particularly enlightened or satisfied with the explanation, even though correct. Our economists have the same problem facing them as Sir Isaac Newton when he grasped the law of gravitation, but he didn't by grasping that law learn how to make an airplane. It took the Wright brothers, who proceeded along an entirely different line of reasoning.

Supply and demand is like locking the stable door after the horse is stolen. Back in January, 1908, we sold hogs for $4.50 on the Chicago market. They told us supply and demand was the reason for the low price, and that doubtless was true, but so far as guiding our future action that $4.50 price was a lie, for it was telling the farmers that the hog business is not profitable, and a lot of them took the hint and got out of it. But two years later hogs were selling at $10 a hundred, and that was also a lie, for it told the farmers that the hog business was a fine thing, and a lot of them again took the hint and got into it, with the result that in another year the price was reduced to $6 a hundred. So from long and bitter experience farmers have concluded that supply and demand is a capricious master. Why not make it our servant? Why not develop organized thought as to the future demand and as to the future supply? That, of course, brings in this matter of a research organization.

The second price-making force I wish to consider is cost of production. Most farmers, and I think the laboring men as well, look on the cost of production as the thing which should set prices as opposed to supply and demand—to sell at the cost of production, that's the only fair thing, but, unfortunately, cost of production is a will-of-the-wisp—you cannot put your finger down on it. You can find out what it costs Mr. A to produce hogs, and Mr. B, but suppose Mr. C has cholera in his herd and he figures his cost of production at $1,000, for he has just one hog left. You might figure up what it cost the three and determine cost of production at $50 a hundred. And if you use that as a basis could you use it to enforce prices? I think the only way we can use the cost of production as a basis for price adjustment is by using what might be termed the ratio method of determining the cost of production. What is the long-time ratio between, say, hogs and corn? With reference to hogs and corn, we know that decade after decade the ratio has averaged eleven bushels of corn to 100 pounds of pork. I think that by studying historic ratios you can determine cost of production in a very real sense; what is the ratio which will keep enough stuff coming to market over a long period of time to satisfy the consuming demand? The cost of production in a cost accounting sense, while it is useful, cannot serve, in my opinion, as a basis for strategic bargaining on the market. We can use it in the sense of advertising for the purpose of convincing the consumer, but that is all.

The third price-making force which I wish to consider is strategy. There is a strategy to the making of prices, as we are all well aware from our past year's experience. We all know about the price drive that started in late January of 1919, when we were told about the Argentine corn that was coming onto the market and how they were going to take off the control price of hogs and everything was going down in thirty days. That was our first taste of a price drive, and then we got another one back in August when the railroad men appeared before Mr. Wilson and stated that they had to have lower cost of living or more wages, and they preferred lower cost of living, and as a result they reduced prices very nicely so far as hogs and corn were concerned, but not as to other commodities. And then we have seen this last drive which started just a couple of weeks ago. I noticed yesterday a dispatch that came out from Washington to this effect:

"Department of justice announces huge quantities of bacon, beef, flour, butter, eggs, and canned goods have been seized from warehouses and hoarders and thrown upon the market to force down prices."

That dispatch came yesterday. Of course, we all know that for every dollar that the speculators lose on this kind of thing the farmers lose a thousand dollars. It shows the instruments that are used as a means of strategic price making. In the first place, of course, newspaper propaganda is used. Sometimes they use the proposition of competition from a foreign country, like Argentine corn. Another thing they use is the announcement of sudden buying of great quantities of pork products by Great Britain, and then the sudden stopping. She has all she needs now and she has stopped altogether. The first time I ever heard of this strategic price force was in an article in the Saturday Evening Post written by Will Irwin with reference to Herbert Hoover. He stated that Mr. Hoover had a stock of 10,000 tons of beans and that those 10,000 tons of beans which he had bought up were dumped on the market whenever the market advanced unduly, and then on the decline Mr. Hoover would buy them back, and then again dump them on the market. That was strategic price making, and according to Mr. Irwin Mr. Hoover used it very nicely to keep down bean prices to the gratification of the buying public; but I don't know how the Michigan bean growers appreciated the proposition.

Another strategic price-making force is foreign exchange. Foreign exchange is, in a sense, a speculative market; as much a speculation as the board of trade in Chicago. You can buy and sell foreign exchange. Before the war foreign exchange was ordinarily weak in the fall of the year, at the time we were selling our products. While at the present time we do not have any absolute evidence that it is being used as a strategic force, I wouldn't be surprised that it is being used as a strategic force against farm product prices. Of course, we are all acquainted with the use of railroad cars as a strategic force. We also have the Federal Reserve Banks with their tremendous possibilities in strategic price making. The speculative markets are all more or less responsive to the interest rates. You have got your car shortages, and then in addition you have ocean freight rates that enter into this strategic proposition. Ocean freight rates are not a fixed thing like railroad rates. Before the war ocean freight rates were twice as high in the fall of the year as in the summer—they were transporting your farm products in the fall. Ocean freight rates have a strategy all their own.

What shall we do about it? I think we must first recognize that we are living in an age of big business—frankly recognize it. Not necessarily kick against it. We are living in an age where things are graded and priced and sold on future contracts. We are living in that kind of an age; an age when things are tremendously under the influence of Wall street and the board of trade. I don't recommend tearing down the board of trade or wrecking Wall street. In fact, I think they have a splendid purpose, but we must learn just how this machinery is being used. Under this price system, unfortunately, it often proves of advantage to business men to hold down their production. The steel men have held down their production to three-fourths plant capacity during the past year, and pig iron as a consequence has recently increased in price from $29 a ton to $40. It is unfortunate under this price system that it is an advantage at strategic moments to hold down production. The laboring men have found out that it is profitable to shirk their work, and to strike for higher wages or for betterment of working conditions—and it is a very unfortunate thing. The cost of the whole thing, unfortunately, is borne by the only people that are not employing this sagacious sabotage, and that is the farmer. The cost of this nasty, dirty work is borne by the farmer. The business men are working under a system where it pays to do this kind of thing. If we don't meet this situation, bolshevism will get us, that's all.

The great present need, as I see it, so far as we are concerned, is to establish an adequate research department, either as a part of the National Farm Bureau or our State Farm Bureau—an adequate research department, from which we will not expect any wonderful immediate results. I would have it gather facts and figures and prepare itself to represent us in price matters as efficiently as Clifford Thorne has represented us in railroad matters.

The Chairman: We will take a few minutes for discussing this subject. That is, if you have any special questions. We don't want any running discussion here, but if there is anything in the minds of any of you that you would like to ask Mr. Wallace, we will take a few minutes.

Mr. Rittgers: I would like to ask if that strategic arrangement has been carried out with regard to other commodities than what farmers have to sell?

Mr. Wallace: It has not been noticeable within the past six months. Of course, in February of 1919 there was an attempt to beat down industrial prices, and at that time the Steel Corporation entered into an agreement with the Fair Price Board, which was then in operation, to hold down pig-iron prices to $29 a ton, but Mr. Hines, of the Railroad Administration, said that was altogether too high, and wanted to buy it lower, so that the whole thing fell through. Since then there has been no apparent effort to use strategic manipulation to force down pig-iron or print-cloth or any other industrial product.

Voice: In other words, the manufacturers were able through their organizations to defeat that kind of a move?

Mr. Wallace: I don't know how they did it. At any rate, pig-iron is higher now than it has been for a long time.

Mr. Browning: Who is it that makes the price? Some people think that the merchant makes the price, and some people think that the buyer makes the price. That is a question that I have never heard discussed, but it just occurs to me that the buyer makes the price, and if he doesn't want to pay the price he can buy something cheaper if he wants to.

Mr. Wallace: I might say that there are two schools of economists based on this diversity of reasoning. One holds to the theory that the buyer makes the price, and the other that the seller makes it. You can approach it from either angle, to suit yourself. I have had a lot of fun doing this, taking bank clearings to represent demand and hog receipts to represent supply. There is a beautiful correlation between hog prices and bank clearings. Supply and demand have about equal effect if you measure them mathematically, and I think that is the most satisfactory way. If you try to measure things in words, you don't get very far.

The Chairman: Mr. Wallace has certainly given us something to think about, and something that we can carry home with us. We are now going to listen to a man that we feel is one among us. He has been associated with us for the past thirteen or fourteen years; he is a man that has done more to secure fair railroad rates for Iowa farmers (I can say this without any hesitation or qualification) than any other man in the state. Unfortunately we have lost him, in one sense, although he is still retaining his residence in Iowa, but he is in Chicago and Washington most of the time, and it certainly gives me great pleasure at this time to introduce to you people once more our leader who has been before us so many times and who has been our guide and our kind of balance wheel in all these things. At this time I am going to introduce to you the Hon. Clifford Thorne, of Iowa.

ADDRESS OF CLIFFORD THORNE.

Friends: It does me a world of good to get back here to the Corn Belt Meat Producers' Association. I cannot express it too strongly. But you know how I feel about it.

At the present moment we are living through a period of uncertainty and change and upheavals in government and industry. We don't know what is going to happen next. It is interesting to live these days even if it is hard on some folks.

In lieu of the world war, there are some problems in industry between the employer and the employe, between organized business and the public at large, that are challenging the thought of the whole human race. In the counting room, in the shop, in the field, in the court room, and in the legislative halls of state and nation the discussion is centering about some great industrial issues.

There are some who fear that international wars will be succeeded by industrial warfare. It would be difficult to estimate which would be more unfortunate, more costly to humanity. Some other way out must be found. Some method must be devised for the peaceful solution of these questions—a method that will protect the just rights of all parties, if you and I expect to hand down to our children, and to our children's children, the fruits of two thousand years of Christian civilization. One road leads to welfare and progress; the other leads to destruction and anarchy. We of today must make the choice.

The labor question is probably the greatest before the American people. You have that question on your farms. Yesterday in Minneapolis I learned of a fellow that had solved the labor question so far as he was concerned—he has a family of three and one-half dozen children. (Laughter.) He believes in producing it on the farm, thereby eliminating the issue—three and one-half dozen children, actually. That man has that family by one wife. (Laughter.) Nine children, altogether—three, and one-half dozen. (Prolonged laughter.) Of course, that is rather discouraging for a young fellow like me. (Laughter.)

This labor question cannot be solved offhand. A few weeks ago I was in conference with the shippers, and I was asked to commit myself definitely to a particular policy that had been reduced to print and passed one house of congress. I took the position that I wasn't ready yet to say what stand I should take. I am heartily in favor of such legislation as will make impossible a general railroad strike (applause); that would be a catastrophe to human industry; but, on the other hand, that legislation must protect the just rights of labor if you don't expect to have an upheaval in this country like you have witnessed in other nations. It is something that cannot be guessed off; and I have noticed that the author of that bill that passed the senate has subsequently crossed it out of the bill.

The labor question is going to be an issue, probably, in the coming presidential campaign. I do not have the solution and I am not going to try to give it to you. There are other questions that I have been worrying with that I am going to give you my conclusions about before I get through. Your questions on the farm, I think, may be properly divided up into two great classes: First, what are the most efficient methods of production; and, second, what is the best way of disposing of and distributing those products? One problem is just as big and important as the other. I don't think I can be of much help to you on the first class; I cannot show you folks how to farm most efficiently, because I am not an agriculturalist. Judge Ben Lindsay tells a little incident that happened in Denver some time ago, that I heard related. A minister was trying to find the postoffice, but without much success, and he asked a newsboy to show him the way. The newsboy showed the preacher the way to the postoffice, and after this favor had been performed, instead of being generous and buying a newspaper or giving the youngster a nickel, or something, he said to the boy: "I'm going to preach over in that tabernacle tomorrow night, and my topic is going to be, 'The Way to Heaven.' I would like to have you come around and hear me." The boy looked him over and replied: "Oh, shucks, a man that can't find his way to the postoffice would have a hell of a time showing me the way to heaven." (Laughter.) I don't think I could assist you much by trying to show you the way to farm.

On the other group of problems—efficient methods of distribution and marketing—there are many questions and phases: legal, economic, etc., that arise. You folks have employed an attorney who is expected to wrestle with these questions that affect the industry as a whole as they arise throughout the year, and I have been trying to do that for a good many years. It is my duty to make a report to you of what has been done, and what is pending. You are entitled to know what I have tried to do. In that connection I want to refer for a few moments to the very interesting and remarkable address that I have just listened to by Mr. Wallace. His portrayal of the necessity of a research bureau along economic lines illustrates the frame of mind that I was in when I went to Chicago, with regard to transportation. I felt that the public, in going into controversies involving railroads, were handicapped because of inadequate facilities. At that time, I am safe in saying, there wasn't one attorney trying commerce cases in the United States, outside of the employ of railroads, that had a rate and statistical department working under his direction; and, on the other hand, there wasn't an attorney for one important railroad in the United States that didn't have an organization of that very character under his direction. The result was that when these controversies arose, one side came forward with elaborate statistical demonstrations of the conclusions for which they were contending, and the other side came in with a lot of eloquence and wit, and a few witnesses from home, without any exhaustive evidence from a rate or statistical standpoint.

At this time I had what I like to consider a little dream or vision—I wanted to establish a department that would be just as thoroughly equipped as any railroad attorney had, so that when I went into these controversies I would be prepared to meet them on their own ground. I had been six years listening to them here in Des Moines, and I wanted to do the thing in the same manner that they did it. I presented that idea to various groups of shippers—I couldn't expect any individual organziation of shippers to finance the whole project, because it was bigger than one group would want to tackle. I went to the oil people and the grain people and the live stock people, and finally we have built up a little organization over in Chicago. We generally have from twenty to twenty-five people, including rate clerks, statisticians and stenographers, at work all the time; and I want to tell you folks the salary that the Corn Belt Meat Producers' Association is paying me wouldn't pay one-fifth of my office rent. The live stock industry as a whole is just furnishing one stenographer in that group of people that are working. I feel that that is unfortunate. I believe that the live stock industry and the farming industry ought to put into the office, either mine or someone else's, just as large a force as Mr. Dynnes of the Milwaukee railroad, or any other railroad, has at work. I believe that the live stock industry of the United States and the farming industry ought to keep two or three statisticians and three or four rate clerks working constantly. Just at the present moment there is a little issue up, and I wonder how we are prepared for it from the farming standpoint? The railroads are about to demand an increase of probably 25 per cent, which if granted will cost the American people in the neighborhood of $1,200,000,000. Now, they are entitled to an increase; they are going to get it; but that is not equivalent to saying that they shall have all they want. It is possible for them to ask for too much, isn't it? The railroads have had a committee of traffic men and accountants working on that question since last November, and there is nobody, either traffic man or accountant, in the United States, in the employ of the shippers, that has been working at all on the subject, that I have yet heard of, outside of that law office in Chicago. There are a number of traffic men present, and I would like to ask them if they know of any accountants, traffic men, statisticians, or anybody in the United States working in preparation of the advanced rate case that the railroads are going to put up in a very few weeks. I don't know of such. A 15 per cent advance in freight and passenger rates would produce over $600,000,000, which would take care of the deficit of the government because of the guarantee of last year, and more than take care of the provisions under Section 6 of the Cummins bill, so that you see if we could prune off the railroads' request for a 25 per cent increase by 10 per cent, that would mean over $500,000,000. It is worth preparing for a case of that magnitude. Mr. Elmquest, of Minneapolis, recently said to me: "Are you getting ready for that case, Thorne?" I replied, "A little, not much; I have enough to do to keep my force busy on the regular work." He then asked: "How much will it cost to prepare for that case?" "Well," I replied, "in 1917 it cost us approximately $17,000; I think we ought to be able to do it for $15,000, and that would include a financial and credit analysis of all the railroads of the country." He said: "I'll put it up to certain industries (that he named) and I think they will take care of three-fifths of the cost." Since then he has not notified me of any success he may have had. One of the organizations that I represented I asked to guarantee $1,500 of the cost, so that the work would proceed at once. They agreed to this, but a week later they telegraphed they would have to reduce it to $500. That particular industry will have to pay about ten million dollars of the advance if it is 15 per cent only. It seems to me pitiful that we cannot learn the necessity of adequate preparation. On the regular routine we have a force. I try to keep our offices supplied with all of the bulletins, dockets and latest available information from the various departments of the government. There is one man supposed to do nothing but advise me every day of anything important affecting any industry with which I am connected, and such steps as have been taken as seem desirable and advisable. In that way a number of things have been brought up during the past year and we have attended a number of hearings.

LOSS AND DAMAGE CLAIMS.

I said that I was going to make a report of the work done during the past year in the office of your counsel. The first proposition is in relation to loss and damage claims, and I want to discuss that for a few minutes. Last year the United States Railroad Administration attempted to initiate a set of rules and regulations affecting loss and damage claims, making them more uniform throughout the country. I have a copy with me of the set of rules that they originally sent out. Among other interesting features of this document, it is provided that you had to furnish a great deal of immaterial information whenever you presented a claim, and under certain circumstances you had to put up a bond. It provided that you had to prove that the carrier was negligent in order to get your claim paid. Again, it provided that if a live stock car was scheduled to reach market by eight a. m. in regular or extra trains intended for the current day's market, and if it were set to the unloading chutes before one p. m. of day of arrival, no claims would be paid. That was a part of the rules and regulations proposed by the United States Railroad Administration. If you were scheduled to reach Wednesday's market and actually got there by one o'clock p. m., they wouldn't pay a claim for failing to reach that market earlier. Again, it provided that if your stock wasn't placed in time for unloading on Wednesday's market, and as a consequence of a declining market you lost by reason of the delay, no allowance would be made for shrinkage. The proof of negligence is repeated three or four times in the rules. Then I have here a copy of the blank claim form, which was submitted to us to fill in. I just want you to glance at it. This is legal-cap size, about thirty lines to the sheet; there is the first page of the form, there is the second page of the form, there is the third page of the form, and there is the fourth page of the form—with an affidavit at the end. (Laughter.) I asked Mr. Howard, head of the claims department of the United States Railroad Administration, if he couldn't do on live stock what he had already done on grain—appoint a committee of live stock and railroad representatives to go into the matter, and Mr. Howard did create such a committee. I see that there are several members of that committee in the room this afternoon. We held a number of conferences, and finally the committee got together on a report eliminating practically all of these offensive features, and the railroad men and shippers signed up a joint report to Mr. Howard; but when Mr. Howard got the report he wasn't satisfied with it, and he has declined to put it into effect. Just in passing I want you to notice a few of the recommendations that the railroad committee originally proposed:

"With the view of not depriving the shippers of the insurance protection and privilege, this committee recommends the amending of the tariffs to provide a reasonable additional charge which will insure the animals against their inherent weakness, or vices, at their insurable value, providing the same are in physical good condition at the time of shipment."

Again: "The maintenance of drenching facilities at regular designated watering points and the amending of the tariffs to provide a reasonable additional charge to cover the drenching of hogs in transit."

Again: "The abolition of the practice of shippers or their representatives acting as caretakers in charge of ordinary live stock, as experience has demonstrated same does not serve the purpose originally intended."

Again: "The adoption of a standard form for the presentation of claims for loss and damage to live stock in transit."

One thing we did succeed in doing, folks, is that we killed the report of the live stock committee of the railroads. Now as to the future: I think that we ought to ask the Interstate Commerce Committee to prepare a uniform set of rules. The large shipper with immense tonnage has a powerful effect on the payment of claims that the small shipper cannot have, and that is an injustice to the small shipper. In the matter of loss and damage claims as it concerns the grain traffic, we have just concluded an extensive hearing and investigation. The Interstate Commerce Commission has issued its final report; the railroad committee and the shippers didn't get together—separate reports were submitted, and the Interstate Commerce Commission has adopted the substance in toto of the shippers' committee recommendations. Probably a third of you are interested in shipping grain, and for you I will make a brief statement. As you know, the railroads have been declining to pay claims on clear record cars. The commission, in their opinion just rendered, hold that the clear record of the car should not be controlling. The railroads have been making a fight to discredit automatic scales, but the commission declines to approve that position of the railroads. Further, the necessity to prove negligence on the part of the carrier has been eliminated. Further, there is not the legal obligation on the shipper to reject an unsuitable car. Further, the railroads are trying to eliminate the hammer test. The commission condemns their position on that proposition. It is to be hoped that the shippers of the country will observe the recommendations of the commission as to the construction and maintenance of elevator scales. This will mean better and more prompt handling of claims.

In the live stock industry we ought to do the same that we did in the grain industry.

I am afraid that that resolutions committee is pretty long coming back. After a bit I think it might be well to suspend the rule to refer to the committee. I would like to have the thing disposed of, and if it is not done pretty soon it will be impossible to get it in print this afternoon.

RETURN OF THE CARETAKER.

The second proposition is as to the return of the caretaker. Mr. J. L. Harris, who is in this room this afternoon, was the chairman of the committee that was created by the United States Railroad Administration that investigated a large number of complaints of organized live stock interests. Public hearings were held and parties properly represented. I chance to have in my possession here this afternoon a record of the proceedings of this committee of which Mr. Harris was chairman. I got this record in a roundabout way that I won't outline, and there are two or three typical examples that I want to show you of what occurred on that committee.

First, as to attendants in charge. The majority of Mr. Harris' committee, three of them against him—listen, folks, three of them against him—recommended the following:

"The committee, after giving such consideration to the question of uniform rules for caretakers in charge of live stock, are unable to reach a unanimous agreement. We are of the opinion that decreases in some instances are necessary, but hold to the view that the carrier's obligation ends when the live stock and attendant have reached destination, and that carriers are not obliged to provide free transportation in both directions."

Now, folks, you remember back ten or twenty years ago, when the same issue was raised in this state, how you came en masse to Des Moines and swamped the legislature until there was a change. Now here was a proposition of just the same issue, that didn't affect Iowa alone, but affected the whole country, and the United States Railroad Administration, with arbitrary war powers, had it within its power to make that change, and three out of four members of the committee recommended that change should be made. But those three persons were reckoning with the wrong gentleman. Mr. J. L. Harris, although in the minority, prevailed with the higher-up officials, and I suggest that you give this man one round of applause. (Applause.)

Mr. Harris: Thank you, gentlemen!

Mr. Thorne (continuing): I had another little illustration to give you. By the way, folks, I am not going to give all of the bouquets to Mr. Harris. Mr. Heinemann was there associated with Mr. Harris a part of the time, and did some magnificent work. He deserves a round of applause, too. (Applause.)

SHRINKAGE ALLOWANCES.

Next, folks, that committee was divided on the subject of shrinkage—two of the committee were in favor of eliminating shrinkage allowances and two opposed it, and I hold in my hand their recommendation. Here is the recommendation of two of the members:

"All shrinkage allowances be canceled and the following rules have ceased and freight charges be adopted: (1) Hoof weights obtained at point of origin to govern; (2) when not obtainable at point of origin to be way-billed at minimum weight and corrected by delivering agent to actual hoof weight, but not less than the minimum."

Mr. Harris, although not representing the majority, won out again, gentlemen, and the shrinkage still stays. I move another round of applause. (Applause.) Now I am not going to tell you how many other things were at stake before that committee. We furnished you with a long list of the things that we had up before the committee for consideration. Mr. Stryker has sent up a note here, "Will you say something on unadjusted loss and damage claims in their present status after the war?" With regard to that subject, the present conference bill has, as I understand it, a provision extending the time. Recently the Interstate Commerce Commission, in deciding the Decker case, recommended that the time be extended, and the railroads have adopted that policy, I believe, in formal instructions issued from Washington. The time should be extended so that the war period should not be included under the statutory limitation provision. You must know that during the war there were enormous claims, great confusion and uncertainty, and it was impossible to get proper attention paid to this subject, and it would be unfair to the shippers to have that clause prevail.

I have a few straightforward and specific facts to give you about some questions and problems that you and I have been facing during the past year. I think that the Corn Belt Meat Producers' Association should know those facts. If there wasn't anything that was handled from year to year that was worth while, this organization might well go out of existence. It is the very fact that there are such questions arising that justifies your continued activity.

There were many propositions connected with pending railroad legislation where your action did good. You sent a representative to Chicago (Mr. Sykes), who served on the resolutions committee, and your attorney was one of the members of the resolutions committee, and we took a very determined stand on a number of important propositions. We did help, first, to kill the transportation board, which has been eliminated from the bill, although introduced and passed in the senate; second, we had eliminated from the bill the pooling of earnings; third, without specific approval of the commission, we have eliminated from the bill compulsory consolidation; fourth, we have helped to get restored the full powers of the state commissions. I think our work has been very much worth while. I am going to refer to various items in a few sentences.

First, the loss and damage claims I have already discussed at some considerable length. I have shown you how the railroads wanted to make the shipper prove negligence; how the railroad wanted to make the shipper fill out a claim covering four pages, and how the railroads proposed to refuse to pay any claim on cattle that arrived before one o'clock on the day that the car was due to arrive. Now, all of that has been abandoned.

Second, the return of the caretaker. I have already stated that a majority of the committee was in favor of cancelling that right of return transportation for the caretaker of live stock, but this gentleman sitting here beside me objected so strenuously that the proposition was killed.

Third, the railroads proposed to change the two-for-one rule, which was later abandoned.

Fourth, the railroads attempted to abolish the allowance for shrinkage, which was later abandoned.

Fifth, there is a miscellaneous list of about fifteen other topics covered by Mr. Harris' committee which I will not take the time to read at this time. We had hearings with regard to those at Washington. We have been fortunate in having such a man as Mr. Harris on that committee, one who retains the confidence not only of the shippers, but also of the railroads, himself a former railroad man all his life, a man of character, capacity and ability, who has been trying to perform his duty in public office in the right way. Mr. Harris has taken care of our interests magnificently in that respect.

Sixth, comes the loading and unloading charges on live stock at Chicago. That case has been argued and submitted to the Interstate Commerce Commission.

Seventh, the charge for feed.

Eighth, the uniform live stock contract. We had two hearings and an oral argument with regard to that, and it has been submitted.

Ninth, filing suit within two years. Modification has been recommended by the commission because of the war situation, and the railroads have adopted the provision up to the present time, and it is going to be put into the law.

Tenth, general class scales, cancelling the existing commodity class rates and substituting distance class scales, were prepared. These were vigorously opposed and finally abandoned.

Eleventh, the construction and maintenance of track facilities. This order was very substantially modified.

Twelfth, the Cummins amendment, restoring full powers to courts and commissions over our common carriers. That is incorporated in the pending legislation, and I believe will become a law.

Thirteenth, proposed elimination of the 75 per cent stocker rate on feeders in Illinois and west. Vigorous protests were made, and it was later abandoned.

Fourteenth, cancellation of rates on less than 36-foot cars. This was later abandoned after hearing.

Fifteenth, proposed cancellation of loading and unloading charge at other places than at Chicago. The Illinois Central started it and then withdrew the tariff.

Sixteenth, track scales. That is a matter that has very recently come up. In the past it has been customary for us to consider the roads responsible for furnishing track scales. However, lately there has been a movement on the part of the railroads to sell those to individual shippers and let those individuals charge for the use of them. This presents a very important issue, gentlemen, because the supreme court of the United States has held that the order of a railroad commissioner requiring the railroad to furnish track scales, in order to remedy discrimination, was not valid under the circumstances presented in the case decided. The supreme court declined to uphold an order made by the Minnesota Railroad and Warehouse Commission. You must show a justification, a public necessity for the track scale, and the mere removal of discrimination is not sufficient. It may be that we will have to organize and build track scales for our own use, if they go too far. We have taken up that matter with the officials in Washington.

Seventeenth, train service. You remember last year we invited Mr. Harris here, and Mr. Sykes has invited him again this year. He has done some splendid work in that connection, but there is still more to do.

Eighteenth, relation between live stock and packing house products rates. The whole subject must be gone over again. That subject has been assigned for investigation. That may mean an upsetting of all our live stock rates unless we are thoroughly prepared to prevent that development.

Nineteenth, the coming advance in rates, to which I have already made reference. We speak of two things, property investment account and return on present value. Don't misunderstand me, the law pending in congress doesn't use this phrase as the basis. The law provides that property investment shall be used so far as the commission should lawfully do so. The facts are that in almost all recent decisions property investment has been the principal factor they did consider as a basis. The other alternative is the present value. The supreme court of the United States has declared that that is one of the controlling, if not the controlling factor. That is why we used those two alternative phrases, but neither the commission nor the supreme court has ever said that six per cent must be granted. What is reasonable varies with the different industries. In some, six per cent is adequate; in others, it is inadequate. What is reasonable varies with the season, varies with the year, varies with the industry. I wouldn't put that amount of money into a gold mine without 100 per cent or more being pretty well assured, but I would be willing to put money in a government bond at less than five per cent, and so would you. The question of what shall constitute the basis upon which to apply this percentage is going to be an issue in the advance rate case upon which will hang the determination of a question involving several hundred million dollars. The last case in 1917 involved over $400,000,000, and this will involve a billion—not one billion dollars in one bunch, but a billion dollars every year, year in and year out. That is what we have before us in the return of the railroads to their owners. We cannot tell what they are going to try to do when they get their properties back. We already have been advised that the Great Northern, the Northern Pacific and the Burlington will consolidate. I am informed that the American Railway Express will try to operate under the consolidation as now in effect. We can look forward to a period of tremendous consolidations, and you know what that carries with it. Suppose all of the live stock shippers in America had one association and delegated to a committee of a dozen or so the power to fix the price on hogs and cattle and sheep in every town, village and hamlet in the United States of America, and then they would get a law passed by congress making it a felonious offense for anybody to sell a hog, cow or sheep at less than that price so fixed. Just think of the colossal problem facing the people of America! That is the problem facing us in the railroad situation, because that is going to be the situation. Wide consolidation we have found is best economically, but we find with that development come some questions and problems that are really staggering in the political and economic thought of this generation, and the solution of those problems will have profound weight on almost all of the other great questions of government connected with other forms of big business. The railroad industry just happens to be the one we tackled first, which, next to agriculture, is the greatest industry on earth. We are going to have some interesting times ahead of us, aside from the railroad question.

We are going to have a revision of our tax laws. Business is getting ready now for a general revision. The excess profits tax is claimed to be a very serious menace to business, and they are going to try to change that. The government is going to require something like four billion dollars a year. That isn't quite what the railroads think they ought to have—it is several hundred millions less, but it is quite a large sum of money, and we must devise ways and means to collect that gigantic sum. Business is getting ready to deal with that problem scientifically and efficiently. Are the farmers making any preparation? Hadn't you better keep your eyes open on this development? Hadn't you better amass a few statistics like young Mr. Wallace was outlining here this afternoon? (Applause.)

The question of the merchant marine, the labor question, organized business in all its forms and varied activities, the tariff, the relation between state and interstate governments, competition from other countries, scientific progress in agriculture itself—all of these departments of thought, research and activity command your careful consideration in order that when you do act you can act intelligently, wisely, not solely for your good, but for the good of all.

THE BANQUET.

The banquet, which was held Thursday evening, was well attended, and thoroughly enjoyed by those present. Secretary Henry C. Wallace acted as toastmaster.

The Toastmaster: Those of you who have been in the habit of attending the annual banquets of the Corn Belt Meat Producers' Association know what our custom has been, to have a number of impromptu speeches, and in following that custom we have always enjoyed them immensely. This year, however, we thought a variation of this program would be agreeable and pleasant to all of you, and in casting about as to whom we might ask, whom we might want to honor, and whom we felt sure would bring a message to us, we thought of Mr. J. B. Weaver, of Des Moines, a man who is carrying on the noble traditions through the second generation, who is devoting himself to service, and who has rendered to the farmers of this state a far greater service than even they know at this time. I don't know of a man in the whole city, or the whole state, indeed, whom it would give me greater pleasure to introduce to you at a gathering of this kind than J. B. Weaver, Jr. Mr. Weaver! (Applause.)

ADDRESS OF J. B. WEAVER, JR., OF DES MOINES, IOWA.

Mr. Toastmaster, ladies and members of the association: The toastmaster has said that usually you are permitted to make the speeches at the banquet, and now he has the nerve to give me an audience of gentlemen who want to speak themselves. (Laughter.) That is about as difficult a position for a speaker as one might imagine. Nevertheless, I am glad to be here to look into your faces; you men, and women, too, because I know the women have been interested right along with you in this great organization that has meant so much in the development and in the life of the state, particularly as relates to agriculture. I look upon you as one of the manifestations of that complex development of this great state that in seventy-five years has marched practically in that time from the raw prairie, trodden only by the foot of the savage, because it was seventy-five years only since they established the fort down here at the Raccoon forks—marched from that primitive condition to the great state that it is today, the lowest in illiteracy, the richest in per capita wealth, the most fertile in this hemisphere, if not the world, the freest, the safest place in which to live, the most comfortable, taking them on the average, the highest type of American citizenship—that's Iowa! And I am glad to face you gentlemen who have endeavored (applause) and done your share in making that possible.

I am a lawyer—if you will pardon me for admitting it to you—supposed to be a dangerous thing to admit; when I went over to the legislature in the Thirty-seventh general assembly, there was some prejudice against the lawyers—there always is, you know. But that didn't make any difference to me, for I felt that any man that is born in Iowa, lived all his life in Iowa, and has seen all that I have seen since the civil war in the development of this state, who doesn't know in his brain, and doesn't feel in his heart that the agricultural interests of this state are not only the great dominant interests economically, but that they carry the entire future happiness and success, all of the wondrous future that should come to Iowa—his day is past on this soil and those who deal with the soil; and that is what I felt over there, and so I was in favor and fought for the new cattle pavilion that will make stock sales possible in this state almost weekly. I worked for your Farm Bureaus, and for your appropriations in the Thirty-seventh general assembly, and some of the men, some of the farmers who stood on the floor of the Thirty-seventh general assembly and fought the Farm Bureau movement and the law providing for appropriations, I saw them at the state convention of Farm Bureaus here the other day. (Laughter.) They are welcome there because they have been converted. And in the Thirty-eighth general assembly I was glad to work for the law which changed the "may" into a "shall" in favor of the Farm Bureau legislation. I was glad to introduce and to fight for a vocational educational bill which permits Iowa to have its share of the federal aid for the creation of, and the paying of, teachers in agriculture throughout these great consolidated schools which are being established over the state of Iowa. And so on down the line. And speaking of Farm Bureaus, what a wonderful organization that has become! I have seen it advance from a few counties until it covered the state. Now this great organization is molded into a State Federation of Farm Bureaus that is not only going to look after market conditions in every county, but is going to tell you where to find your seed and how to treat it, and how to cultivate and care for it; the Farm Bureau will not only do those things and help you in your local marketing, but it is to be the nucleus for the most painstaking, scientific investigation of your needs, and I believe it will be the nucleus that will bring to your interests men of great scientific attainments. In your business you deal with the railroads, you deal with foreign relations, you deal with the retailer, the manufacturer; you are inter-related in the whole life of this state, and you ought to have and must have to compete in this great complex age—you must bring to your particular interests the most scientific and effective help that can be found in the nation. (Applause.) You have a right to it for more reasons than one, but for the great reason that this wondrous nation of ours, this America which we love and which we intend to defend and preserve, that great framework of government, that is found in the last analysis, as we all know, in the soil, depends on men who live with their feet upon the ground and the sky over their heads, working with their hands to produce the necessiites of life for the nation, and while doing that forming nuclei in the farm home, with less tendency to radicalism, with more hope in and for the future of America in these complex times than any other class of our citizenship. And life has become complex, hasn't it? So complex in your business, and every other, and in your relations with others—so different from the old life! Why, you know, I used to farm, myself, back in the days before the railroads were as numerous as they are now. My father and I have driven hogs on the hoof from Davis county down to Alexandria, Mo.—ninety miles; and father also carried mails overland from Bloomfield to Fairfield, as a boy of 14, on the back of old Jim, swimming the Des Moines river three times a week. That was the day of the cradle, the day of primitive farming, the day of individualism, the day when collectivism was hardly felt in the life of the nation, and in those days I farmed—a three-acre farm first, and then forty acres, and then 120. I think I worried more about the hay off of that three-acre place than what we got off of the big place. I watched the clouds and worried whether I would get it all in or not, and if it wasn't gotten in in time we had to put it out again to dry. How did we get it mowed? Old Lon Diggs, very bent, very crooked, very black, with a very broad-brimmed hat, with ragged clothes, and in the rents of his shirt I could see the marks of the slave driver's lash, and to me, a boy raised in the civil war period, that man's back with the marks on it symbolized to me the cause for which we fought in the civil war. So old Londonderry Diggs would come with his scythe, with an edge as sharp as a razor, and he would never take his feet off the ground as he swung his scythe through the hay, and the stubble would be as smooth as thought cut by a lawn mower. After the hay was cut we had to get it into the mow. I would gather it into haycocks, watching the clouds for showers, and then we had to get some one to haul it in. Who would we have? Why, old Father Marr. He was the drayman for the town, and he had two horses, both blind in both eyes, he himself blind in one eye—and only one eye for the whole outfit. (Laughter.) The place was full of trees and stumps, and he would come and load up his rack, and would hook over a tree or stump every twenty feet or so. (Laughter.) Those were the great old days!

And then in November father would say, "Jim, let's get things in for the winter." The suggestion of winter coming stirred us to activity to get our cabbages and celery and fruit into the cellar—that great cellar with double-decked bins on either side filled to overflowing. How different from this day of the refrigerator, which is usually almost, if not quite, empty. Oh, the odor of that cellar! How wonderful it was! I tell you, we felt then, as a boy, just like I imagine a squirrel must feel when he has his nest all full of nuts, and he is ready for cold winter's ice and snow to come. Everything was in! Great days! The days of individualism! Wonderful old fellows that used to come up to see us in those days! Old Uncle Guy, who had lived sixty-eight years on that same farm in Van Buren county; he would drive a team of shaggy-footed colts, and we boys, seeing him coming, would cry, "Here comes Uncle Guy!" and then rush down the yard, climb over the gate, and greet him as only children can. We would come with him up to the yard, get the horses out, bring him to the house, and proceed to pile all over him. That dear old man was as elemental as the soil in which he worked, as the sky over his head, as the animals that he raised about that great old barn. Wonderful stories he could relate that I might tell to you! Then there was one very, very different. He was a wonderful man, was Uncle John. Uncle John, when he wanted meat in those early days, how did he get it? When he got religion he decided he wouldn't hunt any more on Sundays, so he sat down in front of his kitchen window on Sunday morning and prayed for meat, and lo, here came a deer out of the thicket, and Uncle John says, "Hey, you come around tomorrow and I'll attend to your case!" One time at a protracted meeting he told me how he got meat. With us at the meeting were John Landis and

John Crowley and Tom Struthers, his three cronies. His story went like this: "Last Monday morning I was out of meat, and I went home and got my rifle and went up on the hill in the clearing where the deer came, and I got down on my knees and said, 'Oh, God, send me meat!' and I had hardly got up from my knees when three deer came into the clearing. I pulled up with my rifle and got one of them, and I was just about to shoot another one when the Lord said, 'John Spencer, are you a hog?' I said, 'No, Lord,' and He says, 'You prayed for meat and you got meat; be satisfied with one deer!'" and he added, "but if it had been John Landis or John Crowley or Tom Struthers, he would have taken all three of them." (Laughter.)

And so these were my associates in boyhood down around the farm. I spoke about getting in the hay. I was driving down town in the automobile one day, going down Grand avenue, with all the roar of traffic, when my car bumped into a load of hay. For a moment, under the influence of that sweet-smelling hay, I wasn't there at all; I was back on the farm with old Lon Diggs and old Father Marr. A whiff of that hay had made me forget myself and my surroundings—there's no odor quite like it—and I was so full of thoughts of bygone days that when I got to the office I sat down and wrote it up, and for a moment I will take you into my confidence.

A LOAD OF HAY.

Hard-paved streets and hurrying feet,
Where it's oft but a nod though old friends meet,
Rattle of cart and shriek of horn,
Laughing Young, and Age forlorn,
Bound for the office I speed away,
When my auto brushes—a load of hay!

Chauffeur curses, I scarcely hear,
For things I loved as a boy seem near—
Scent of meadows at early morn,
Miles of waving fields of corn,
Lowing cattle and colts at play—
Far have I drifted another way!

Hark, the bell as it calls the noon!
Boys at their chores, hear them whistle a tune?
Barn doors creaking on rusty locks,
Rattle of corn in the old feed box,
Answering nicker of toss of hay—
Old, sweet sounds of a far-off day!

There, my driver stops with a jerk,
Then far aloft to the scene of my work;
But all day long 'midst the city's roar
My heart is the heart of a boy once more.
My feet in old-time fields astray,
Lured—by the scent from a load of hay!

(Applause.)

But those old familiar days are gone, and each one of us now is linked up inevitably to a great world situation. And when we come to think of them, I want to speak very briefly of three great eras in the life of this nation. What are they? First, the era before the civil war. Do you know the great thing for you and me to learn today, that we must take home, that you must take home as an organization, that I must take home to my heart and consciousness, is that I am linked up, that I am interdependent, that I am one of so many units in the commercial, agricultural, industrial life of the world, and that I cannot prosper alone, and that I have no right to strike out for my own prosperity only, forgetting the great relationships in which I walk through life. That truth has been brought home to us! You know that none of us was born with the consciousness of our internation relation. What was the first move toward the discovery of America? It was old Marco Polo, the Italian. He wasn't satisfied with staying in Italy; he wanted to see the world, so he went off toward the far east to Siam, where he made many discoveries, and on his return he wrote a book, and a copy of that book came into the hands of Columbus. Then Columbus became dissatisfied with staying in his own land, and believing that the relation of his country to the other portions of the great world were of importance to his nation he started out in his little vessels to sail the great unknown seas to the west, and his cry was "Sail on! Sail on! and on!" something new, something different, something hidden; and he found it. Not only Columbus, but the Puritans, when they came and established colonies upon our eastern coast, did they try to hold it to themselves? No! They welcomed the Danes; they welcomed the Germans; they welcomed the French; they opened their hearts and the doorways of the nation to all of the world that they who wished might come here to build up a new kind of civilization. It was an international outlook, wasn't it? But they were thinking, too, how all men might share and have some relation to this great new nation that was then being born. Not only so, but in the revolutionary war itself, it wasn't something that just happened upon American soil, because we drew to that struggle Kosciuszko from Poland; old Von Steuben, who was on the staff of Frederick the Great, we drew from Prussia; we drew Rochembeau and Lafayette from France; we struck a light back there in those revolutionary days which was seen all about the rim of the globe, wherever civilized man lived. High it was held aloft, searing its ideals into the life of the world, and our great experiment in government became a symbol of the thought that lay in the hearts of those who loved freedom—all about the rim of the globe. And then our treaty of peace in 1783 was signed not in our country, but was signed in that hall of mirrors at Versailles, that great hall. When I think of Versailles I feel like pausing a moment and thinking of the advance of civilization since the time of Louis XIV. It was Louis IV in 1681, I believe, who stood in that palace of Versailles—that wondrously beautiful palace that cost $100,000,000—and in answer to the complaints of his people that he was wasteful of their money, he cried, "The state! I am the state!" There absolutism spoke at Versailles. Then a hundred years wheeled by and in 1783, in the same palace of Versailles, was signed the terms of peace between British and American representatives that made of this country a nation in the eyes of the world, and there democracy spoke from Versailles. And then nearly another hundred years of the wheel of time turned around, and the helmets of the Prussian lancers were raised in the palace of Versailles, and Bismarck and von Moltke and Roon spoke, and the voice was the voice of autocracy and absolutism. In that palace at Versailles around a table Bismarck, von Moltke and Roon, and all the representatives of absolutism, stood up and holding their glasses aloft declared the formation of the German empire, the united German state, the empire of blood and iron, and there again we heard the voice of absolutism speaking from Versailles. But there came another turn of the wheel of time, and then at Versailles met the representatives of all the world, with absolutism crushed to earth, and democracy—democratic principles vindicated almost unanimously throughout the world, and then again democracy spoke from Versailles. Let's hope that was the last great message, in that treaty and in the situation there at Versailles, for that historic occasion.

But I have taken too much time in talking to you about Versailles; how it bristles with interest in the light of the great happenings that have occurred there. And so after our nation was launched there was the pre-war period. Yes, how wonderful it was! With this great nation to exploit; with all its resources; why, all a fellow had to do, if he didn't like his job, was to take a team and drive a little farther, go into the woods for food, and he was master of his own home. And then began that great march, first to the Alleghenies, then across the Alleghenies, then down into Kentucky, into Indiana, Missouri, Illinois—hardly yet into Iowa, just a little into Iowa—the most beneficent movement, that home-loving, homeseeking movement of which your father and my father and mother were a part, a great movement, but that time held in solution an irrepressible conflict, and you all know the irrepressible conflict came, and it came up to be settled by the arbitrant of the sword. We lawyers know this, that the truth has a way of thrusting itself up through the crust of the most careful schemes and plans and statements. If you allow the truth to come up, as through this table, and stand there, you will have to reconcile all of your case with that fact. That is the truth; the divine might of the truth; and the great truth that thrust itself up to the gaze of society before the civil war is this, that no man has a right to profit or sell the labor and the service of another. That was the great truth, and that truth came for settlement to the arbitrant of war, and your father and my father went out in '61 and '65 at the call of their country. One day father came home in April of '61 and he said to mother, "Clara, have you heard the news?" "Yes," she said, "I have heard the news, James," and she said, as she carried her first born in her arms and myself, expected in August, "Yes, James, I have heard the news, and I want you to go!" There was the spirit of the mothers, the sweethearts, the sisters of '61 to '65, and when I think of that I pray that it may come true what I saw on a monument on Lookout Mountain:

> "May the heroism which dedicated this lofty field to immortal renown be as imperishable as the Union is eternal!"

And that spirit of the women and men was matched in 1917-18 by this greater nation, the women working everywhere, the Red Cross, the Y. M. C. A., and other organizations, and working in their homes knitting and making bandages, and the young manhood of the country to the tune of four millions, with thirteen millions more ready to go, donned the khaki in defense of their country. It was the emergence of this nation to the life of the world, the same great spirit of heroism that will yet save and preserve this nation, you may depend upon it. (Applause.)

Well, we went through that struggle. There was the brave spirit that carried the burden of it upon his heart, who understood it so well. He was a typical example of Americanism. Think of the two great men—we are near to Washington's birthday, you know, and we have just passed Lincoln's birthday—Washington, the representative of Virginian aristocracy, and Lincoln, the barefoot boy from the slab cabin in Kentucky, and yet both typical spirits in the life of this nation. But what do we learn from that truth?—that it doesn't matter whether he comes from the ranks of aristocracy or the ranks of industry, if he is a man, true to his fellow men, then he has an equal right to march under the folds of our wondrous flag. (Applause.) And so that struggle passed, and with the struggle in the civil war, came to an end the great, simple, yet complex, period that preceded the scientific era in this country. And then began what? And then man began to harness the forces of nature, didn't he? And what wondrous harnessing it has been! It has gone on down the ages, down the years, the electric light, telephone, aviation, wireless, the submarine, the dreadnaught, the electric railway, the transcontinental railways—oh, yes, it has been a perfectly wondrous age! I will tell you a story of the Canadian prairies. When I was first up there we were driving along in an automobile up in the Hudson Bay country, and there were no houses, no trees, no people, just the vast rolling, billowy, waving grass of the prairies as far as the eye could reach, even as it was in the days our fathers saw it. We were going along over this prairie and off in the distance we saw a great herd of wild horses—possibly a thousand of them. Horses are like many other animals in that they are very curious, and on seeing us they came thundering down upon us; we could hear the thunder of their hoofs, we could hear them neighing as they came, and within a hundred yards of us they stopped, with their heads in the air, watching that strange creature (we would make a noise with the engine by using the cutout) as it dashed across their prairie. Oh, what a wondrous thing is a herd of a thousand horses! But when we throw the energy of the inventive genius of the world to the mastering of our scientific problems, we see such an institution as stands at Keokuk, where the power of not 1,000 horses is harnessed, but the power of 250,000 horses, the thunder of whose hoofs is transformed into the crash and roar of giant turbine engines, their silken sides become the thousand glistening shafts, their neigh changed to singing the song of concentrated industry.

Now let me tell you one thing about this age: You and I and all the rest of humanity in all civilized lands, like children with a new toy, were intoxicated from seeing the wheels go around. But this nation of ours, in spite of that, was not so materialistic that it lost its great ideal of liberty and freedom for us and for the rest of the world. How can I prove that? I can prove it by Cuba. Cuba, that little island off our southern shores, whose cries were brought across the seas to American hearts. Did we absorb her? No! We set her free from the yoke she had worn so long, and said, "Now, little sister, cultivate your garden in peace, and take your place in the great sisterhood of American republics." I am proud of a land that in that great commercial age could do as fine a thing as that. Again, there is the Philippines; and here is Mexico, just at our southern border, rich beyond the dreams of avarice, but we haven't exploited her. We haven't wanted to go in, and in this great nation there is no substantial wish to absorb Mexico. Do you suppose that could have happened in Europe? We may have to go into Mexico, but we will go in to get out; we will go in to give them what we want to give to all of the world—orderly, peaceful government. (Applause.) The point I wish to make is that we haven't been tempted. There is another fine example of that land from which my brother comes, there is that great Canadian border, two thousand miles long—Canada has rested there for over one hundred years by our side and we have witnessed not with envy but with pride the development of that democracy similar to our own in spirit up there on the northern border, and in all that two thousand miles of length not so much as a shotgun to protect us from invasion. (Applause.)

I speak of these things because it shows that right in the midst of this great mechanical development, commercial development, industrial development, economical development, we yet did preserve our outlook, our sane spiritual outlook upon the rest of the world. But there was a nation that did not preserve it; there was a nation that excelled in all these things that I have mentioned, but who said, "Our mechanical and commercial efficiency and organization are the great things that we shall worship in this world; there is no such thing as interdependence; we will make our nation big enough and strong enough that it will dominate the world; there will be no such thing as morals in our international relations." That nation was growing while we were growing—growing upon the continent of Europe. She invaded every market, her ships were found upon the seven seas, her salesmen were active in every market upon the face of the earth; all she had to do was to wait the results of peaceful penetration and she would have had a hold on the world that nothing under the sun could have loosened, but she did not wait—and the great day came! Do you know what that was born of? Her desire in 1914 was born of the taste of blood when she overran and took Schleswig-Holstein from Denmark and then a few years later turned upon Austria; but most of all in 1871 when she invaded and subdued France she had a taste of blood. And so in these later days she looked to the west and saw the smoking chimneys of industrious Belgium, and looking farther to the west she could see the hulls of England as they tossed in the waves—swift shuttles in the empire's loom—and she was envious. She looked to Russia with its tremendous resources in man power and undeveloped wealth; she looked to the far east and the Orient, and she dreamed of a Berlin-to-Bagdad railway, and to her people she said, "Don't think, just work! Follow me and rely upon the army!" And the day came when she launched her great drive for world domination, and as the world heard the thunder of her troops and guns, and heard her "Deutschland Uber Alles," there came a great tremble in your heart and mine. But a great day did come when at Cantigne, at Chateau Thierry, in the Argonne, at Belleau Wood, the day when the allies had reached their last possible, utmost effort, when the very future of civilization hung in the balance, there did come the day when Foch threw into the brazen face of the enemy the irresistible might of the free sons of this great republic of ours. (Applause.) History will be written for a thousand years on that great struggle—and shall we say that we won the war? No! How I dislike to hear anyone say that "We won the war." The war was won by every woman that knit or worked in the Red Cross booth; the war was won by every nurse that stood beside the aching, mutilated bodies of men that suffered; the war was won by every man that worked in a factory or farm loyally doing his great service as in time of peace; the war was won by every voice, by every muscle, by every effort of all of the great free peoples who struggled to bring about that great crowning victory. (Applause.) But history will say this, that at the time when the struggle lay in the balance we did tip the scales and throw the might of this great nation on the side of what you and I firmly believe to be the cause of justice, and to hold in its grasp the hope of all the world. And then after that what came? There came the armistice, and there came the treaty; there came the debt of the five greatest nations, increased from twenty-one billions to two hundred and twenty billions; there came the sight of ten million men dead or maimed upon the bloody fields of the old world; there came the sight of the disruption of labor when there emerged upon the plains of the world that sinister and bloody figure of irresponsible savagery, there appeared bolshevism; there appeared more than that, there appeared mountains upon mountains of paper money, valueless now, measured by the standard of gold of all the world. Ah, there were days, you know, when we thought that America was making a lot of money—those early days and years of the war. We were, oh, so busy, piling up gold on this side of the Atlantic! How was it coming into our coffers? It was coming there by loans to the allies; it was coming there by the selling of securities that the allies held—American securities; it was coming there in ways that we didn't understand. We, like most of the world, didn't know that the day would come when there would be retribution for our apparent prosperity; but the day came when we learned the great fact—and if we haven't learned that it is a hideous thought in the sight of the world; there came a day when we learned the fact that the America of today is linked inevitably, in these great commercial times, times of conflicting interest, with all of the world, and that we cannot prosper here at home alone and have a disorganized and disheveled and ruined world on the other side of the sea. That is the fact that has come home to us, and doesn't it come home when you think here now how probably not a pound of food products from this country, two and one-half billion pounds of pork products last year, eight hundred and six million pounds of dairy products, and none of it can be sold upon the other side? Ah, let's learn this, that a world busy, active, with its hands at the shuttle, at the loom, at the plow, everywhere busy—if this old world were only busy now there would be no difficulty ahead of us. But what does all that disorganization mean to you farmers? It means disorganization; it means a Europe that cannot take our products; it means a Europe that threatens the very civic life of the world, and it means that this great thing we are facing—and let's not forget it—is best described by what Sherman meant, only he didn't visualize it—no man could—that is what Sherman meant when he said "War is hell!" Nothing but hell for the world! And so came the treaty, and of our foreign relations I say that this world cannot exist successfully without America's co-operation, with its money, with its organizing power, with its necessity for its great markets (applause); cannot exist without them, so that it is the duty of the president, the duty of Senator Lodge, the duty of every man in the United States senate, to get together on whatever reservations are necessary to put that treaty across, to make this a settled and orderly world. (Applause.) What the future holds for us we cannot know; what it has done for us in agriculture we know something. We know that this great railroad problem has come out of it. Let me speak candidly! I am a candidate for nothing, so that I can speak plainly to you! In this period of two or three years with the returning of the railroads into their normal state, with the settlement of matters in Europe, with the treaty in operation as we hope it may be, we may all of us have to sit tight—we hope we will be willing to give and take a little, remembering this, that this great nation has come to its fruition here and development under the great constitution of the United States, 130 years of a wondrous pathway of progress, with more freedom, more opportunity, more safety, more beauty of life, than is known anywhere in all the world. So let us resolve here tonight that whatever comes in the days ahead of us, whatever sacrifices are demanded of us, that we remember the flag with all its great traditions, and that we will be true to the constitution, and whatever reforms we think should be made in the American life, whether they be economical, social, political, or whatever they may be, they will be sought for and achieved by the orderly processes of the ballot, and under and in accordance with our great fundamental law, that wondrous, that great, beneficent constitution of the United States. (Great applause.) I admire this organization for one thing especially—you have attended right to business. I mean by that, you haven't run off after any isms; you haven't taken any short cuts; but you have known this, that you had to organize, and it is proper for you to organize; you have brought to your problems the most expert help that you can get, and you haven't run off after some movement which is initiated in this country for political short cuts, movement whereby one class says, "We will seize the government and operate it for ourselves." If I know anything about the Plumb plan, it was just for that purpose and with that idea. He says, "We will operate the railroads and pay full wages to the employes, and if there is anything left we will give Uncle Sam half of it and ourselves take the other half." And that plan is a recrudescence of organized selfishness in this country. (Applause.) What is meant by the nationalization of mines? It means just the same thing with respect to the mines, and it means not only adequate wages—no man has fought harder, no man will fight harder than I from morning till night, and all night if necessary, to see that living conditions are made better, to see that we have social justice, to see that adequate wages are paid; but when any class of men tells you and me that "we will stop the mines and starve us into submission to serve their political ends," I say they mistake the temper of the American people. (Prolonged applause.) No! We will reach approximate justice in this country through the Cummins bill, and if not through it some other machinery for the arbitration of industrial disputes in the great, basic, essential industries. Turn it around—you farmers cannot stop producing; you cannot stop along in July and say that you will not plow any corn or produce any more foodstuffs until we agree to something. You cannot do it from the very nature of things, and you won't do it, because it is an immoral act. But suppose we again turn it around as some of the mine owners have done and say, "I don't think we are getting enough, so we won't open the mines until we get what we want." Take the same illustration and apply it to any of these great, basic, essential industries—something must be done. We will come to arbitration first, and if that doesn't seem to fit and serve the purpose, something else will be developed. I am inclined to think that it is coming in all industries. If it is not, then in the basic industires, those that keep us warm and clothe us; in the steel industry, without which the modern world cannot exist, and with the railroads, without which we cannot live now in this modern life of our great cities, there will come compulsory arbitration—absolutely compulsory. (Applause.) Anything else is intangible, anything but a sure solution of this problem, and so we come down to the great period of this day with its social unrest.

I was down in Boston the other day and I asked them about the police strike there, and, you know, they advocated the doctrine in Boston that the men who are employed to keep the peace may refuse to keep the peace unless they get such and such wages, and the answer to that doctrine by the people of Massachusetts was 135,000 majority for Governor Coolidge and his position. (Applause.) Why was that answer made? Because it was an expression of public opinion of the American people. Now, I am a lawyer; I have tried cases before juries, and I have found this to be true: I could take each individual juryman and find that he would have his prejudices; he might be not dependable to give a square verdict on the fact, but when I took them all together, there was an animus collectively that would reach in the main a just result. And so there is planted down deep in the American heart—a tribute to the American education—the power to reflect; and there has been planted down in the human heart a recognition of what is really right, and the American nation will look to that basic, fundamental, popular judgment for a solution upon the right lines of all these great problems. And what I ask of the farmer is this: I ask that he sit steady, because (and I do not say it as a mere compliment) he is the foundation of our national life; that he sit steady; that he seek to achieve reforms in constitutional lines, by the orderly processes of the ballot; that he avoid men who advocate quick political remedies, and that he prove as I know he will in Iowa a great safety valve in the life of the state, and through the state in the life of the nation. And yet you gentlemen have a duty to perform. You farmers will have to produce to the limit; you will have to produce just the same as during the war, because if production of foodstuffs is also shortened or lessened, it may be nobody's fault, they may be treating you unfairly, but if it is lessened greatly and the world is fed more sparingly, there arises throughout the world that sinister figure which is threatening to run amuck in the life of Europe today. So I call upon your patriotism. When I think of that I am reminded of some lines by Tennyson. We have just seen the spectacle of a great war flare up in the midst of the activities of the world; so great that none but could feel the heat, none but could hear the roar of its voice. It has died down; that great flame has died down in the aspect of war, and now we are going to snooze around? You may say that it is not up to you, particularly, but remember what Tennyson says:

"Slowly comes a hungry people,
As a lion creeping nigher,
Glares at one who nods and winks,
Before a slowly dying fire."

Here is a world that is hungry, and it is creeping, creeping on civilization. You have a great duty to perform; not sleep and doze before a slowly dying fire in this great world conflagration, but remember your relation to society, produce more food, is the great thing that the flag expects of you in the crisis of the nation. And loyalty? Oh, yes! If there is any man who has come over here, has lived under our flag, raised his family or is going to, had our educational advantages, has spread out upon our prairies, got Iowa land, living here in the freedom and sweetness of Iowa life—if there is any man who thinks there is something better on the other side, or that he cannot here have equal or fair opportunity, he and his children, I hope they will put him in one of those "arks" that we sailed recently from American shores, and I rejoice that the great Statue of Liberty that has stood on the Atlantic shore for so many years and welcomed the needy of all the world to the country, cannot only say "Come," but also say "Good-by forever" to the advocate of violence and the anarchist. (Applause.) I have great faith in the great body of American people; I have faith in the laboring man, taken as a whole, his wife and daughter worked in every Red Cross booth and in every hospital on the other side, and his sons in 1917 answered adequately the call of the world for succor, and from 1917 to 1919 this nation has not turned bolshevik, and it is not going to turn bolshevik, in my opinion! All we need is to reach the great heart, the purpose, the self-consciousness, the beautiful, sweet purposes that really do animate this great American people. And to the farmer we look most of all because he is in an elemental position, with his feet on the ground, with the sky over his head. What a wondrous life it is! And so I will close by repeating certain lines:

"We in the ages lying
In the buried past of the earth,
Built Nineveh with our sighing
And Babel itself in our mirth;
And o'erthrew them with prophesying
To the old of the new world's worth,
For each age is a dream that is dying,
Or one that is coming to birth."

I believe—and I am not stating it just to please you—I believe that there is enough courage, enough determination, enough remembrance of the flag of Washington, of Lincoln, of the boys who rest tonight under the cliffs of Scotland who went down on that great vessel, there is enough remembrance of those who rest under the mounds in the soil of France and of Flanders tonight—they have become little segments, those mounds, of the American homeland, those that rest on some far slope on foreign soil, there is enough remembrance of them and of the old spirit of our fathers and mothers, and those of colonial days, to send this great nation down on its way with even a greater, fairer destiny than its mighty and wondrous past, and will make of it not "a dream that is dying, but one that is coming to birth." (Prolonged applause.)

ADDRESS BY CLIFFORD B. THORNE.

I have been rambling around this country since I left Des Moines. You folks started me on my journey, and I have always been profoundly grateful for your splendid confidence and backing during all these years. During the past years I have been wandering about the country considerably and having lots of interesting little experiences. I thought perhaps you folks, my friends back here at home, would like to hear a few words about some of the people I have met, and incidents that have happened.

I was going to tell you just two or three of them. One fellow down in Texas by the name of Radford presented a case to me in which he wanted to get a carload rate on the human hair from Chinamen. (Laughter.) Now, can you conceive of why a man would want to ship a carload of Chinese "pigtails"? That was a new one to me. (Laughter.) Did you ever hear of press cloth? It is used in our mills for filter. In the past they had used goats' hair and camels' hair, but that source of supply was becoming depleted and Mr. Radford learned that over in China the people were cutting off their hair and throwing it away, and he found he could use that. At the present time he has 800,000 pounds of Chinese pigtails in storage at Houston, Texas, or in transit there. (Laughter.) He said that he will average about two million pounds a year before he is through, and he further insists that it is a permanent enterprise—that the pigtails are growing back there in China just like the trees of the forests. (Laughter.) I hope that he will succeed.

On the Pullman as I go back and forth from one town to another, I have an opportunity to meet lots of interesting folks. I think it surpasses any club! For instance, on one trip to Washington I had a long talk with Samuel Gompers, met two major generals in the smoking compartment, and also met the secretary of the peace legation in Europe—a young lad that had with him a book where all of those who signed the treaty of peace also signed their names for him to preserve.

The power of an idea was illustrated to me on one of these journeys. You know, Emerson says that the creation of a thousand trees of the forest is embraced in one acorn. That well illustrates the possibilities of an idea. Ideas are the things that make change, and cause progress and development. One day I observed a man on the other side of the car reading a book on aviation. I asked him if he manufactured flying machines. He said, "No, I just like to read this." We fell to discussing things in general, about the war, and so on, and he told me an interesting incident that had come under his observation. A young man in his twenties, a young man who had been unsuccessful as a lumberman, had conceived the idea whereby he could transport to Europe the very finest grades of lumber in the midst of the war, when they were manufacturing airships over there and were requiring the best of lumber obtainable. He conceived the idea of transporting that lumber from America to Europe without one penny as cost of transportation; when other people couldn't even get ships to haul their stuff across; he got the ships, and got them to ship it for nothing. Now, can anybody suggest how he did it?

In shipping machinery, guns, etc., they have to have what they call dunnage; they have to have lumber to keep the crates and boxes from rolling and working out of place under the influence of the sea. In years past the steamship companies have been using the cheapest lumber obtainable and then throwing it away on the other side. But the thought came to him to furnish the finest kind of lumber for this purpose, knowing that while they might spoil some of it, it wouldn't all be harmed. With that proposition in mind he went to the steamship companies and offered to furnish them dunnage free of charge provided they gave him the salvage on the other side of the ocean. They agreed to it. He went the rounds and got them to sign contracts to this effect. Most of the principal steamship companies and most of the government transports that shipped materials across the ocean made this contract with him. After awhile it became evident that he had to have expert assistance, so he employed an expert lumberman to do the work for him at each port on a commission basis; and the gentleman to whom I was talking was the representative of this young man in Baltimore. Eventually some of the companies with whom he had contracts got tired of his making so much money out of his idea and canceled the contract, and he renewed it again on this basis—whenever they didn't have sufficient dunnage he would furnish it on the terms of the original contract. The British government relied on its own employes to get the dunnage for it, and fell down, and this gentleman had already sent out three shiploads from Baltimore alone, where the British government had failed to get the dunnage. This young man, still in his twenties, cleaned up over a million dollars profit in two years of the war, as the result of an idea.

One of the most interesting men with whom I have come in contact during the past few years, while I have been rambling about, was a German Jew, whose name I will not mention because he doesn't want it published in this manner. He came to this country an orphan boy sixteen years of age. He first received a position as office boy in a large institution in New York City. At sixteen he could speak French, German and English. Within a few months he noticed that the company had large dealings with Mexicans, so he decided to study the Spanish language. At the end of the year he came in the president's office one day and said, "I should like to try to act as an interpreter, if you will let me, for these gentlemen tomorrow." The president said, "What do you know about Spanish?" He replied, "I have studied it during the past year." The boy was given a trial, and thereafter was employed as an interpreter. He knew three languages at sixteen years of age, and acquired the Spanish language in one year with sufficient fluency to act as interpreter. During the second year there, Senator Clark had a case over in Germany involving technical matters and won a decision. The court's decision covered an entire book. There were some sentences that were a page and one-half long. Senator Clark took this decision to several interpreters in New York City to get them to translate it into English as he wanted to read it, but as soon as they learned that it was full of legal terms they declined. He took it to New York City University to the professors who understood the German language, but they didn't understand law, and those who understood law didn't understand German. He couldn't find anyone to translate that book for him. The president of this company which I haven't named was an intimate friend of Senator Clark. The stenographer for the president learned of this incident and said to my friend, "Why don't you translate it?" He replied, "I couldn't possibly do it; what are you talking about!" "Aren't you studying law?" "Yes; what of it?" "Don't you know German?" "Yes." "Well, then, I would tackle it if I were you." So at seventeen years of age this boy undertook the task of translating a decision of a German court which no one else whom Senator Clark could find in New York City would undertake. Within sixty days he had translated it. During that time he discovered the inventor in New York City and spent an entire Sunday with that inventor out at his plant. The inventor, with vanity touched, was delighted to show him all about the place. The youngster read two or three books on the subject, and within sixty days he had translated that decision into English, working some nights until two or three o'clock in the morning, and then the stenographer ran off a copy on the typewriter and handed it to the president, and the president gave it to Senator Clark. Senator Clark said, "I would like to see that young man." He was introduced, the senator congratulated him, and said, "You ought to be compensated for this." And he gave him a check for $500 for work performed after hours during months when he was receiving $15 a week as an interpreter. A lad with that perseverance couldn't help but succeed. He went the rounds of the office, from one position to another. A number of years later it was disclosed that they were paying an exorbitant price for certain materials they got from Mexico. The young man asked the company to send him to Mexico and let him try to get it, and they replied that they had tried that and failed. They refused to send him. The officers of the company hesitated because they thought the

Mexican representatives of the company would be very seriously offended. Later my friend said, "I want a sixty-day vacation, and I'll take it in Mexico. Will you let me go?" They finally agreed to let him go. The Mexican representatives of the company were very polite and courteous, but made it a point not to let him get out of their sight if they could prevent it. However, one evening at the hotel he met a man thoroughly posted on mining in Mexico. With this as a start he made a digest during those sixty days of the mining situation in Mexico, listed all of the important companies, listed the quantities and qualities of the metals they produced. More than that, he secured an option for all the metal that his company needed at a saving of a very substantial sum on every ton. He then sent his report in to the New York office. They telegraphed back for him to report at once at New York. He then was told that he should return to Mexico in charge of their entire properties, with carte blanche authority to do whatever he wanted to down there, and he built up for that company the largest mining property owned by any company or individual in Mexico.

This German Jew had me out to his home for dinner one evening. Sitting at the table I noticed a handsome clock—an old-fashioned grandfather's clock. I admired it, and he said, "That clock has a story." He said: "My wife learned of a clockmaker whose physician said that unless he had a change of climate he could not live. I went to see him and asked him if a change to a different climate or different country would possibly save his life, and he said that it would, but he didn't have the money. I asked him how much he would need and he said he would be able to get along on $50 a month in addition to what he himself had." My friend said, "I'll be glad to let you have $50 a month, and you can pay me back when you have the money, and if you can't it's all right." The clockmaker took the trip and was gone two years. It cost my friend $1,200. On his return the clockmaker was cured. The man came into my friend's office and said, "I am sorry, but I am quite sure I will never be able to save enough to repay you; you have saved my life and I cannot even give you back the money you have advanced before I die, but I have something at home that I have been working on during my leisure moments—it is a clock, the masterpiece of my life's work; I put my life and my heart and my soul into it, and I would like to make a present of that clock to you if you will accept it." And that was the clock standing there in the dining room of the home of my friend.

My friend started out as a German Jew immigrant; he now receives $70,000 a year as the representative of the company operating properties throughout a large portion of the West.

I meet many interesting folks in different parts of the country. One little visit I made was intensely interesting to me—that was to Springfield, Illinois. I had a case down in Springfield involving the Illinois rates, and in the afternoon I started out to find if I could discover an office that had been occupied by Abraham Lincoln. I went from building to building, and finally found a copper plate which stated that Lincoln's office was in a building formerly standing on that location. It had been previously torn down. I wasn't satisfied with that, and the man inside told me that perhaps I could find a building some place if I went to a certain banker. I went to that banker and he referred me to a certain studio; the man in that studio referred me to a lawyer, and that lawyer referred me over to a certain corner of the square. I asked this lawyer, "Is there anybody in Springfield still living that was an intimate friend of Abraham Lincoln while he was living here?" And his reply was, "There are three kinds of friends, one an acquaintance, one a friend, and the third a very intimate friend. There is one of the last description still living. His name is Mr. Bunn," and I promptly resolved to hunt up Mr. Bunn. But first I went to that office building. It was quite interesting. Mr. Lincoln had an office in front, and in the rear he lived. Strange as it may seem, there wasn't a tablet or mark of any character to indicate that this was the former office of Mr. Lincoln.

That evening after dinner I went over towards Mr. Bunn's home, and then the thought occurred to me, "Here, Thorne, you are nothing but a curiosity seeker; Mr. Bunn is probably bored to death by them." My lawyer friend had said, "This man Bunn seldom talks to anybody," and with that thought in mind I turned around to go back to town to a moving picture show. My train left at 11:30. I got about halfway to the movie show, when I said to myself, "Thorne, you had better go back and talk with Bunn; you may never have another chance," so I turned around and went back. I knocked at the door, and a man came and invited me in. I told him I wanted to speak to Mr. Bunn. He wanted to know whether I wanted to see Mr. Bunn senior or junior, and I replied, "The older gentleman." He said that he was then eating dinner. I asked to be excused and was going back, but he insisted that I stay, and presently an old, tottering, gray-haired, feeble man, over eighty years of age, came into the room, all smiles, greeting me most cordially. I said I was simply an attorney, had a case there at Springfield, and had heard during the course of the day that he was an intimate friend of Abraham Lincoln, and then I asked if he would be kind enough to give me simply a word picture of just how Lincoln acted and looked in real life. Mr. Bunn then commenced talking. I had hard work getting away to catch my eleven-thirty train. He told me incident after incident in the life of Mr. Lincoln. It was the most interesting interview I have ever had in my life, with any man that I know. Mr. Bunn, it seems, had had charge of the cases for the bank for whom Mr. Lincoln was counsel, and in those days, Mr. Bunn said, many cases were tried which today are settled. He came in contact with Lincoln very closely for a considerable period of time. His first introduction to Lincoln occurred as follows: One morning he was out sweeping the sidewalk; Lincoln came along the street, stopped, and said, "How did you like my speech last night?" Bunn replied, "Oh, it was a good talk, all right, Mr. Lincoln, but you won't stand any show with Mr. Douglas, he's an orator." And Mr. Bunn said that sort of aroused Lincoln, who answered, "But Mr. Douglas is wrong," and then he proceeded to argue out the case with him, pro and con. Lincoln was after the viewpoint of the man on the street who didn't have any axe to grind. He wanted to see how he had impressed the public. That incident ripened into a friendship that grew closer as the years passed by. Mr. Bunn belonged to the little coterie of people that helped Mr.

Lincoln during his earliest and latest campaigns. They found, for instance, that Mr. Lincoln was spending too much time writing letters, and they chipped in and hired a man for something like $2,000 a year, so that Mr. Lincoln could be free to work on his speeches. Mr. Lincoln, whenever he had a speech to deliver, would write it out and then arrange for a certain group of friends to meet him in a certain office, read it to them and ask for their criticisms. Mr. Bunn recalls the speech in which occurred the famous passage, "a house divided against itself cannot stand." Every man around that room condemned it and told him he must not deliver that speech in that manner, that it would mean his defeat; but Lincoln stood up and said, "Friends, I am going to deliver that speech; Douglas may defeat me for the senate, but Douglas will never be president." Lincoln didn't say that he wasn't going to be president; he said, "Douglas will never be president." Mr. Bunn got to his feet, pounded his cane on the floor, and said, "What are you going to do with a man like that!" It was like talking to a seer, a man who could look far into the future—"What are you going to do with a man like that!" And that little group of people, living and working with Mr. Lincoln during his early days, saw him gradually rise higher, higher and higher, until he became the colossal figure of the nineteenth century which he now occupies in human history. Think what a thrilling experience that was for that little community.

At the time that Mr. Lincoln had been elected president and was going to leave Springfield for Washington, an incident of interest occurred. News had been spread around that he was going out a half hour before the regular time. Mr. Bunn went over to see Abraham Lincoln and told him not to do it, that the whole country was going to turn out to bid him good-bye, and it would break their hearts if he did not wait for them. The general of the army in charge of the special train was afraid of an assassination, but Mr. Lincoln said, "I will leave on schedule time, Mr. Bunn." The next morning Mr. Bunn went down twenty minutes ahead of time, and just as he approached the depot the train was pulling out of the station, and soon disappeared from view. Presently, however, the train was seen to be backing slowly up to the depot. The newly-elected president had reversed the order given by the general of the United States army and had commanded that the train return. In a few choice sentences Mr. Lincoln bade farewell to his fellow citizens, and today those few words are engraved beneath the statue of Lincoln at the state capitol in Springfield.

In the capitol building at Springfield, in the room used by the house of representatives, on one side is the picture of Lincoln, and on the other a picture of Douglas. One picture is framed just as elegantly as the other. It seems that they thought just as much of one as they did of the other. As I gazed at those two pictures, the thought was impressed upon my mind that it took a Douglas to make a Lincoln! If it hadn't been for that cross-fire; if it hadn't been for that man Douglas, America would not have had a Lincoln! And another thing occurred to me, how a man may not only reflect the changing and developing opinion, but he may lead public opinion. Lincoln had been almost a failure, with all of his capacity and ability; he had been defeated for congress; he had been defeated for the United States senate; and he couldn't get an appointment for office in the department of the interior for which he had applied. But when that great idea took hold—the preservation of the Union, for that day and for posterity—when he thrilled this whole nation with that thought, he became great, he became immortal.

Mr. Bunn told me about the Gettysburg address. Governor Yates of Illinois went to Gettysburg to that celebration, and on his return they were down to the hotel to hear an account of what occurred. Governor Yates spoke in the highest eulogy of Edward Everett, saying that it was the most wonderful speech he had ever heard anywhere, but he spoke not a word about Abraham Lincoln. Finally Mr. Bunn asked, "How did Mr. Lincoln do?" "Well," said Governor Yates, "it was a failure; it fell flat; nobody cared for it that I could see; just a fractional part of the audience heard it," and in disappointment they finally broke up and went home. Weeks passed by; then some magazine over in Scotland or England published that speech, and in publishing it described it as a classic, stating that it would probably rank as one of the greatest of the nineteenth century. A New York daily read this article in the magazine and published the speech in full, with the account as it appeared in the magazine. It was immediately reprinted all over the United States, and spread like a prairie fire. Today, you know, that oration of Lincoln's, which takes only about two minutes to recite, ranks as one of the most celebrated productions in the English language.

I want to say that in all my little journeys about meeting folks, one of the most striking personalities that I have ever met, one that has had a profound influence on my life, lived in this home state of ours. Four years ago next Sunday, the 22d, I was called over to a certain church in this city, and in a room there I saw an heroic figure lying on the floor —a friend of mine had died. That man, when over forty years of age, had to change his occupation—he was declared a consumptive, and it wasn't until about forty-nine years of age that he began on his real life's work—he became a leader in the thought of his state and of the whole nation, in many departments.

A few days after that I was asked to make a little talk over at the Y. M. C. A. In going over my papers the other day I came across these notes, and I want to read them to you in closing, because they picture to me one of the strongest personalities whom I have ever had the pleasure of knowing:

"Henry Wallace never held a public office, but he helped to mold the thought of this state on many of the great questions of the day, concerning which Iowa has led the nation. He was a private citizen, but he helped to place upon the statute books some of the most important legislation of his generation; he defeated legislators and congressmen; he was an adviser at critical moments in the lives of governors, of men in the United States senate, and in several cabinets; and he received a distinguished honor at the hands of the president of the United States. It is this man in whose memory we are gathered together upon this occasion.

"What a standard we have here, by which to measure the size and stature of some of our public men!

"There are some who never knew Mr. Wallace except in the pleasant interesting relation of a friend or acquaintance. In the casual conversation, mild and cheerful, exchanging views in the most courteous and polished manner, on the various subjects of the day, one would scarcely realize the tremendous fighting qualities of the man, which were wrapped up in that vigorous personality, the product of an aggressive combative Scotch-Irish ancestry.

"For those of us who only knew Mr. Wallace in later years, with his stalwart and powerful physique, it is hard to believe that he was a consumptive in middle life. At the age of forty he was weak and emaciated. A summer in Colorado and California availed nothing. His mother and seven brothers and sisters had died of tuberculosis. He was told by his physician that he must leave the ministry at once, or he would be dead within a few months. With characteristic courage he abandoned the life for which he had been trained by education and experience.

"He commenced life all over again out on the farm. Few would have had such courage. Within eleven years he completely rid himself of that dread disease.

"The publication of Wallaces' Farmer was commenced when Mr. Wallace was fifty-nine years of age. When most of us are ready to quit life's work, Henry Wallace commenced the period of his greatest usefulness.

"To review the positions taken by Henry Wallace upon public questions during the past thirty years, would be to review the record of the important political and social developments of the day.

"There are many public men who deal with the accepted platitudes of our fathers; men who studiously avoid presentday subjects of bitter controversy, especially those where one's own constituency are fairly equally divided. And then we have the quiet folks who demonstrate their wisdom by their silence. That course may be the safer one for the professional politician. But if men of keen insight into the wellsprings and sources of human progress, men with capacity to grapple with these great issues shall remain silent, humanity must inevitably suffer.

"Wallace was not a follower. He was a leader of men. He was constantly dealing with mooted questions, about which the great contests of this age are centering.

"There are some men who carefully avoid new and untried ground in dealing with public affairs. They find it safer to let other people do the pioneering. Wallace was one of those constantly searching for new developments, and new methods by which a person could help in the onward trend of human progress.

"Mr. Wallace was not simply a mind-mannered philosopher, content to suggest and advise on the moralities of life. The ability to wage a successful fight was one of the dominant characteristics of the man. In fact, that was the quality which made him a leader in western thought.

"Wallace was more than a pioneer. He was sane, and well-poised. His foresight and breadth of view did not desert him on questions of large importance. While he was constantly taking positions on the many controverted issues of the day in state and national affairs, rarely did he find it necessary to change his position. And he never did so on great questions.

"Wallace had the courage of the pioneer, and the poise and balance of the statesman.

"In no other part of this nation has the sturdy, rugged strength of the farming communities had such a powerful effect upon the prevailing sentiment on public issues throughout the entire state, as we find has existed in Iowa during the past generation. And no man in the history of this commonwealth has contributed more to that situation than Henry Wallace. That condition of affairs had made Iowa a leader in national councils, in all the great forward movements of the present day.

"At one time while crossing the ocean, Mr. Wallace was discussing with an acquaintance what his greatest ambition in life had been. He stated:

" 'My aim was to develop the agriculture of the nation, and especially of the west; to aid in developing a class of farmers mightier than Caesar's legions, more invincible than Cromwell's Ironsides, the stay of the country in war, its balance wheel in peace when other classes lose their heads; and that I wished so to live and work that when I was dead and gone my name would be remembered by thousands as a man who had left the world better than he found it.'

"This martial spirit of the western farmer, his interest in the big things of state and national importance, must not perish.

"Wallace carried the spirit of the west into national councils. It was not strange that the editor of one of the great national magazines published in New York City should ask Mr. Wallace in 1910 to tell the readers of that publication 'the political and economic feeling of the people thruout the middle west; what they want the government to do; what you think are the most important tasks in public life, both for city and national governments; and, in a definite, concrete way, to sum up the whole situation.'

"This is the principle upon which Mr. Wallace based his whole discussion: 'Every man, whether in private or public life, should endeavor as far as possible to give equal opportunity to every citizen, and to secure and to enforce a square deal between man and man.'

"In these days of war and the preparations for war, listen to these words uttered by Henry Wallace six years ago:

" 'Much of the present suffering and want of the world is due to preparations for war, when no one wants to fight and there is nothing to fight about. To such an extent have these preparations gone on, that a foolish act of some subordinate may any day begin a war that would put back progress a hundred years.'

"Mr. Wallace carried the spirit of the west into national councils. He made his influence felt in many avenues of life, aside from the affairs of state. Mr. Wallace was a leader in developing the efficiency of the farm. Aside from innumerable articles in Wallaces' Farmer, he engaged in outside activities. He published a book sixteen years ago outlining the value of raising clover on the farm. In 1897 he was instrumental in inaugurating the first special dairy train in the west, and perhaps in the world, the object being purely educational in character. Mr. Wallace's leadership in agricultural matters was recognized by his election to the presidency of the National Conservation Congress in 1910, but he did not confine his attention to the material welfare of the farm. The social life, the life in the home, received equal consideration. His Sunday school lessons published weekly in Wallaces' Farmer have become classics. These covered the entire Bible three times.

"I know of no man who has lived such a well-rounded life, dealing with religious, political, farm and business affairs, and successful in all, whether as editor, speaker, teacher or preacher. He was recognized as a leader in each field.

"I am just learning the bitter heartache and pang which it means to say 'Goodbye' to a beloved parent. My mother, who will not be with me long, has suggested the following poem as proper for this occasion:

"An old man going a lone highway
Came at the evening cold and gray
To a Chasm, vast and deep and wide.
The old man crossed in the twilight dim,
The sullen stream had no fear for him;
But he turned when safe on the other side
And built a bridge to span the tide.

" 'Old man,' said a fellow pilgrim near
'You are wasting your strength with building here,
Your journey will end with the ending day,
You never again will pass this way;
You've crossed the chasm, deep and wide,
Why build you this bridge at evening tide?'

"The builder lifted his old gray head;
'Good friend, in the path I have come,' he said;
'There followeth after me today
A youth whose feet must pass this way;
This chasm that has been naught to me,
To that fair-haired youth may a pitfall be;
He, too, must cross in the twilight dim—
Good friend, I am building this bridge for him.'

"On the evening of February 22d, I went over into the little room of the Methodist church where the body of Henry Wallace lay. I can still see the rugged, powerful physique, and the sturdy features of the man. People came and went. They paused in little groups for a short time, here and there about the room, conversing in low tones. Music could be heard occasionally coming from the adjoining room. I stood there a long time, silently contemplating that magnificent specimen of mankind. It seems as though I were in the presence of a king. He had been a leader among men. I would not have changed a line or a feature on that body or face. They all told the story of the life of the man. He had seen conflicts, keen and bitter. He had fought hard, and he went his way calm and triumphant.

"There is an artist watching you every hour and every day of your life. He is recording every act and every thought with the chisel of time on your face and on your body. Your fancies, your dreams, your generosity, your envy, your thoughts of hate, and love, your nobility and kindliness, are all written there, imperishable and everlasting, so long as the memory of man shall continue. You are that artist.

"With these thoughts in mind, I looked at the face and form of Henry Wallace for the last time. What a man was there—indomitable, strong, fearless, courageous, sturdy and powerful. What a noble man had been created out of the elements of time and eternity in the image of God." (Applause.)

And after meeting folks here and there and everywhere, this thought impresses itself most powerfully upon my mind—we admire intellect and ability, but that which longest remains in our memory, that which we revere to the last day of our lives, is the recollection of a man of character. These contests come and go, and may succeed or fail, but we must most of all be something within ourselves if we wish to acquire the respectful friendship of our fellows. In the future as I go about my task, I am not going to be just simply ambitious to succeed—I do want to help a little now and then in getting things done right, and that is my object. I may make mistakes from time to time, I may go wrong, but I want you folks to be charitable with me and help me, for please remember that my object all the time, in season and out of season, will be to do that which is right—I am your servant, and that is my object in life.

I thank you heartily! (Applause.)

The Toastmaster: In recent years it has been our custom to elect officers at the banquet. I will receive nominations for the office of president at this time.

Mr. W. P. Dawson: I have risen to my feet to do what I know every member of the Corn Belt Meat Producers' Association would be glad to do, and that is to place in nomination for president Mr. A. Sykes, our present president.

Mr. Hill: Second the nomination.

The Toastmaster: Are there other nominations? If not, I will entertain a motion that we suspend the rules and elect Mr. Sykes by acclamation, or authorize the secretary to cast the ballot for the association.

Mr. White: I move that the rules be suspended and Mr. Sykes be elected by acclamation.

Motion thereupon presented by the toastmaster and unanimously adopted by the convention.

Other officers were elected as follows:

Vice president, R. M. Gunn, Mount Vernon.

Treasurer, Chas. Goodenow, Wall Lake.

Director Second District, E. D. Baird, North English.

Director Third District, D. W. Mott, Hampton.

Director Sixth District, Chas. Cessnay, Grinnell.

Director Eighth District, G. W. Swan, Creston.

Director Tenth District, Joseph Cox, Boone.

Mr. Ames: I move you that we authorize the president of the association to name a committee of three members to visit the Iowa Agricultural College.

Motion unanimously adopted.

The President: I thank you, ladies and gentlemen, for the confidence you have again imposed in me in this respect. I think I have said before that you have probably come to the conclusion that I am not fit for anything else so that you just keep me here. That seems to be about the conclusion of the matter, but I will say to you candidly that I had intended to retire at this time; I had made up my mind fully to that effect. I felt that under existing conditions, taking my own business and affairs into consideration, that I couldn't longer afford to make the sacrifices that I had been making for the last twelve or thirteen years. I think, if my memory has served me right, that I have been serving in this capacity for thirteen years; but some of my friends got hold of me and insisted that I stay another year anyway. Well, of course, that simply tells the story, and I'm here! I haven't resigned; I don't know whether I will or not; possibly I will, and possibly I will not. As I say, I appreciate the confidence that has been imposed in me by the members of the Corn Belt Meat Producers' Association. I, along with the rest of you, have simply tried to do my best, not only to make your association a success, but to care for your interests, to see that you get a square deal, that you aren't unduly imposed upon, and to encourage you in every way that I could to go on with your organization. I think I have often said to you that it didn't make much difference what became of Sykes as far as that is concerned, but it does make a lot of difference to you what becomes of this organization. That's the main thing to look after —your organization, the welfare of your association. I think there is a great future before this organization. There isn't any man that has been connected with this association, either as an officer or as a member, that is in any way ashamed or abashed of his record. This organization has a long and honorable record back of it of usefulness, of real accomplishments, and the future, of course, will be largely what you make it, so far as that is concerned, and if we continue to hew to the line in the future as we have in the past, and take care of these things as they come up, and look after them in a businesslike way, as we have tried to do in the past, we will continue to make progress. And right here I would just like to say, along with Mr. Weaver, that I don't think there is anything that has attended more to the wellbeing of this association and the promotion of it, and to give it, boys, a prestige among the people of the country and the nation, than the fact that we have just attended strictly to our own business. We knew what we wanted before we went after it, and then we stayed by it until we got results. We didn't play to the galleries very much in any spectacular way; we haven't been an organization of that sort; we have simply sawed wood, and we have got a splendid record of results to show for the work we have done.

Now, whether I stay with you or whether I don't, as I say, I don't think it makes very much difference, personally, but the main thing is for you folks to see that your organization is maintained in a high state of efficiency and keep right along the line that you have been following, and you need have no fear of the future. I thank you! (Applause.)

Adjournment.

FRIDAY, FEBRUARY 20, 1920.

Convention convened at 9:30 a. m.

The Chairman: Now, gentlemen, if you will come to order we will proceed with our program.

The first number on the program this morning is Mr. Owen L. Coon, of Chicago, on Railroad Claims. Mr. Coon had some correspondence with Mr. Wallace during the fall and at a meeting of the executive board Mr. Coon was selected to look after the claims for members of the association who might desire it. Now, that doesn't necessarily mean, of course, that there is anything compulsory about it.

ADDRESS ON RAILROAD CLAIMS.

By Owen L. Coon, of Chicago.

Last year there were 4,000 live stock claims filed against the Chicago, Milwaukee & St. Paul Railroad. During the same period there were 16,000 grain claims filed against the same railroad. Grain and live stock —the two commodities in which the cattle feeder and farmer with his interest in farmers elevators is concerned—thus form one-third of all loss and damage claims. When we realize the significance of these figures, the subject of railroad claims begins to take on importance.

But when we go further into facts and figures, and find that there is now being filed with the Chicago & Northwestern Railroad about 5,000 live stock claims every year, and about as many more against the Rock Island—and that the Chicago, Burlington & Quincy Railroad Company actually paid over 3,000 live stock claims averaging $92 apiece, we begin to see the necessity of these two things: (1) Reducing the number of your live stock claims; (2) taking steps for the more efficient handling of the remainder.

First, as to possible ways of reducing the number of your live stock claims. You, as a shipper of live stock, can do far less in this direction than can the shipper of grain. Many—far too many—grain claim losses result often from the failure of the shippers to properly secure the sheathing at the side of the car and properly install grain doors. But in live stock 85 per cent of all claims are for delay in transit, for which the railroad and the railroad alone is usually responsible.

But there are some things you can do. First, have your car completely loaded when the train pulls in. If you are just a trifle late, and every other shipper along the road is likewise, a delayed train is certain to result before destination is reached, with a large number of claims. Then, if you are situated on a branch line railroad which has a special stock shipping day, try as far as possible to use that day. More prompt delivery is certain to occur and there is far less chance for delay.

If there are a few vicious animals in the shipment, be sure to partition them off from the rest. The Chicago, Burlington & Quincy Railroad claims that this is done by only about 50 per cent of the live stock shippers. The railroad is exempted from liability, in law, for loss due to viciousness of animals—so neglect on your part to properly partition vicious animals may result in a claim upon which you will never be able to effect recovery.

In shipment of calves and young cattle partition them off from the older and heavier cattle, as over 60 per cent of the carcasses of calves, it is said, show unmistakable evidence of having either been horned or trampled to death by the heavier ones.

The death of hogs during hot weather forms the large bulk of the 15 per cent of live stock claims which are upon dead and crippled animals. During the first hot weather in the spring of 1918, there were heavy losses in shipments consigned to East St. Louis on several different days, one day's loss amounting to over $11,000. The losses on six or seven days amounted to from $7,000 to $10,000. As to the cause of such losses, I do not want to express an opinion, for the reason that I am not a qualified veterinarian. But I do want to give the railroad's explanation, because there is probably some element of truth in it, and if taken with a grain of salt—as I know you can take it—may prove of some value. Of the losses at East St. Louis just mentioned, the railroad claims 90 per cent of the carcasses showed death resulted from acute congestion of the lungs, which is suffocation from overheat. The hog, they claim, is fattened to the limit and usually in a small feed lot, so that in order to get his feed and water he need take little exercise. As more weight is put on, his muscles become increasingly flabby and the heart and lungs weak. When he is driven to the railroad more than an eighth of a mile in hot weather, or hauled a long distance in the hot sun, the exertion begins to then throw off the poisons of the system and a heavier load is put upon the lungs and heart than at any time during the process of feeding. If the animals are then loaded in that condition, the close contact of their heated bodies gives no chance to cool and death from suffocation results. The railroads consequently advise to never load hogs when in a heated or panting condition. Give them time and opportunity to cool off after arriving at the pens before loading.

Another point of advice the railroads give in their propaganda to reduce claims is never to apply water to the head or back of a hot hog, but rather upon the floor of the car that a cool place may be provided in which he can lay. To prevent overheating, they also advise hanging six ice bags containing about fifty pounds of ice to the roof of the car, two at each end and two in the middle, to serve as a cooler for the air and keep the floor cool and damp from the melting ice. It is maintained that during the summer of 1918, not a single case was found at the stock yards in Chicago where hogs died from overheat in cars that were properly iced. Of course, the ice can not be found conveniently at many country stations—and it seems there is some dispute as to the value of such a method—but I pass the suggestion on to you that if these things can be conveniently done they can do no harm, and may do a lot of good.

Having considered some possible ways of reducing the number of claims, let us now consider the more efficient method that has been established to handle your live stock claims. In the past, all too often these claims have fallen into the hands of shyster lawyers, who have taken railroad vouchers payable to their own order, and remitted only a small part of the amount obtained to the shipper. The Chicago & Northwestern Railroad will not receive a claim for one such lawyer operating in Chicago unless he has a signed power of attorney, which on verification, is found to have been signed by the shipper. In many cases they have found, on investigation, that the power of attorney was forged and that with duplicate supporting papers having been obtained, an attempt was being made to collect without any knowledge on the part of the shipper.

Or you may have filed the claim yourself, or through your commission merchant, or his agent. You may have secured payment in many cases, but often you have had to take 50 or 60 per cent where you should have had 100 per cent, and frequently have had to wait a year and a half for that. And for this reason: There are thousands and thousands of claims on file in the leading freight claim offices. Yours is only one of the mass. To get it up for attention and keep it there, requires a personal visit with the man handling your claims—and often several of them. Correspondence is all sorted away nicely in the files, but don't get the right results, nor get them quickly. You haven't the time to drop your other affairs and come to the city to look after the matter yourself, neither has your receiver, or the traffic manager of the various live stock exchanges thruout the country where not located in Chicago and convenient to the claim department. Merely filing a claim will not get results. It takes a great deal of the right kind of follow up work. The work done by clerks in the offices of most commission men is at the best only superficial, because it is to them strictly a side issue.

The average shipper, I believe, is not familiar with the way in which a railroad claim should be supported and filed. Many such claims that I have seen in freight claim offices consist only of a hand-written letter, stating an arbitrary sum sustained as loss with no statement as to how the loss was arrived at, or any information to support the claim or enable a railroad claim agent to start an efficient investigation. What is the result? The assistant in the freight claim department—the man who does the actual work—passes it up to handle the other claims that can be investigated more easily. The shipper who has done all that he thought was necessary wonders why the claim is not paid.

Again, you will find that the large number of claim assistants in a freight claim office make the actual decisions on your claims. Whenever an adverse decision is given, the claim must be taken up to his superior. This can be done only by a personal visit for correspondence never reaches the right man. It is here that the shipper, the commission merchant, or his agent, not located in Chicago, often fails to accomplish results.

It is to overcome these evils, that the Corn Belt Meat Producers' Association, together with the Farmers' Grain Dealers' Association of Iowa, Indiana, North Dakota, and several other states, and the National Swine Growers' Association, have established a railroad claim department in Chicago to care for all of your railroad claim troubles. The leading railroad claim offices are located there—in fact, six of them are only three blocks away. It is in Chicago that the decisions on practically all of your claims are made. You may ship to Sioux City, or to Omaha, and yet if you are located on the Rock Island, the Chicago, Burlington & Quincy, the Illinois Central, the Chicago & Northwestern, or the Chicago, Milwaukee & St. Paul, and your shipment either starts or is delivered upon any one of these roads, your claim can be decided in Chicago. We are in constant personal touch with the men who handle your claims. What information is necessary to make good on the claim, we obtain where such is possible. We file the claim with the proper information attached and in the manner that will secure the quickest action. Correspondence is reduced to the very minimum and "red tape" is eliminated.

We aim to give that attention which a matter involving real money should receive. We can't always secure results, but we do believe we are in the position to recover every possible cent for you. And if in the course of a year, this department does not save you two or three times the amount of your membership fee, I believe you will be the exception. The expenses of the department are defrayed entirely by the nominal charge on each claim of 15 per cent of what is collected, where the claim is received in the very beginning. Railroad vouchers are made payable only to the order of the shipper, and sent to you that you may be assured you have received the entire sum paid in any settlement; the 15 per cent is remitted later by your separate check.

But to accomplish efficient results we must have your coöperation in two ways: (1) File all your claims thru this association claim department. (2) Send them to us in the very beginning and before they have been filed with the railroad.

Remember that your claim must be filed within six months, if the shipment goes into another state, and often sooner, according to the provisions of the live stock contract if it has not gone outside of the state. So it is well to always file the claim as soon as it arises and never let more than three months elapse.

Send us the claim in the beginning and before it has been declined. We can then be of much more service to you. A railroad claim decision once placed on record can usually not be changed without suit. But if we receive it in the beginning, the right work can be done at the start and the claim worked up diplomatically to settlement without having to combat an adverse decision previously given.

We ask you to file all your claims through the association claim department, that the railroads can be made to feel there is an organized power behind each and every claim that is filed, demanding justice and action in its settlement. The average live stock claim can not afford to be litigated by the individual shipper. The railroads pursue the policy of making it too expensive in time, money, and effort to the shipper to make collection on his claims, with the hope that he will be discouraged from pressing his rights. If the railroads are given to understand that when a meritorious claim, no matter how small, is declined, they must fight the organized power of all the shippers of an organization, results not otherwise thought of will be obtained. Organization is everything.

One man working as your agent and doing nothing else but handling claims and representing the organized strength of your scores of shippers can do far more than any one shipper standing separate and alone. It is only as each member files all of his claims thru the association claim department that the pressure and influence coming from your organized strength can be felt by the railroad. It is for that reason that we ask you to file all your claims thru the association claim department.

Having considered possible ways in which we can reduce the number of live stock claims, and the method which has been adopted to bring about more efficient results on those that are bound to arise, let us remember a few legal principles which are the safeguard of the live stock shipper's rights. There can be no limitation of liability upon the actual value of "ordinary live stock" under the Cummins amendment. The railroad can not limit its liability for the full loss that has been sustained by any method whatever—even in consideration of granting a lower rate to you on the shipment. It can not enforce a stipulation that it shall be liable only if negligence is proved. All that must be done to make a case of liability against the railroad is to show that the animals were not delivered at destination in the same condition in which they were accepted by the railroad. The burden of proving any loss is upon the carrier. They are liable for what loss may result from decline in the market during a delay. They are liable for any shrink during delay. They are liable for any extra feeding charges incurred as the result of the delay. They are likewise liable for any dead or crippled animals. The only way they can escape liability in such a case is to show that the loss resulted from fire, weather, an act of God, as a flood, or viciousness of the animals. If they cannot crawl out from under liability under one of these excuses, your claim is valid. It is only a question of going thru on it in the proper manner to attain results.

Until recently, the railroads were declining claims upon which suit was not brought within two years and one day. This was in accordance with the stipulation in the live stock contract. If you have had claims refused to you upon the ground that they were outlawed and no suit brought within two years, I advise you to send them in to us as such a practice on the part of the railroad has been held illegal and invalid.

If you should order a double deck car, and two single deck cars are furnished you, see that only the rate for one double deck car is charged you, not the sum of the freight rates on two single deck cars. If you are in doubt as to whether such an overcharge in freight has been made, send the matter in to us for our advice. Remember that we are there in Chicago waiting to serve you and that we are successful only as we attain that end. Don't file a claim unless it is just and valid. Play square with the railroad and by all of you joining together and working thru one organization, see that the railroad plays fair with you, and gives prompt and reasonable settlements. As to your old claims on file, simply send us the claim number and we will do the rest. As to your new claims, send us the papers and we will make up the claim for you.

Member: Is a man entitled to any damage where hogs die from overheating?

Mr. Coon: I would say that you have. Every claim is different from every other one. You cannot say, "Yes, you have a good claim," without knowing all of the facts concerning it. If there is a dead or crippled hog where the car isn't overloaded, it is simply a question to determine whether its death is due to the viciousness of another animal. They might say there is no liability, but all you have to show is that the shipment was received at destination in a different condition than that in which it was accepted by them. They are liable in law until they can show they are not liable.

Member: What is the basis of overloading?

Mr. Coon: Well, take a 36-foot car, I wouldn't say exactly, but I think it is 17,000 or 18,000 pounds on hogs. If you overload a car, do this thing—be sure to state the actual loading weight on the live stock contract. If you do that, you can get the railroad then. It is the same way with grain. During this car shortage a number of shippers have overloaded their cars a great deal, and I have advised them to overload their cars all they want to, and then put it on the bill of lading; but if you overload the car and they don't have notice of it, they are not liable in case of loss; but if you overload and state the full loading weight, if you overload it with live stock or grain, or anything else, put it on the contract, and then they have got notice of it and they cannot raise any objection if claim is filed.

The Chairman: Now, gentlemen, I think we will have to close this discussion at this time, as we have a number of people we want to hear from.

We have with us, as the most of you know, a number of men who represent various of our interests. We have Mr. Park, who represents the Chicago Live Stock Exchange; Mr. Stryker, who represents the Omaha Live Stock Exchange. These men are both men who are practical business men in the claim business, and I might say that Mr. Stryker has been handling the claim department at Omaha for years. While Mr. Park has only been at the Chicago exchange for a little less than a year, he has also been affiliated with another big concern prior to that time in the claim department.

Now, what I started out to say was, these men are going to be presented to you later on—we don't know just when. The way our program is arranged, because some of these gentlemen want to get away at noon, some of these gentlemen can stay over, they informed me, and the probabilities are they will talk to you right after the noon hour.

Without further explanation I will introduce to you Mr. Stephen Bray, of the United States Department of Agriculture, who will speak to you on "Work of the Bureau of Markets."

FEDERAL SUPERVISION OF LIVE STOCK MARKETS.

By Stephen Bray, United States Bureau of Markets, Washington, D. C.

The work of stock yards supervision is one of the public activities which is being conducted under the emergency wartime legislation known as the Food Control Act. This act was approved August 10, 1917, and was for the general purpose of "encouraging production, conserving the supply and controlling the distribution of food products and fuel." One of the provisions of the act is that it shall cease to be in effect when the state of war between the United States and Germany shall have terminated, and the fact and date of such termination shall be ascertained and proclaimed by the president.

Technically we are still at war, although there has been no fighting since November 11, 1918, and in view of the fact that a condition of actual war does not now exist, the question as to why we should continue to function under wartime legislation would be a pertinent one. The answer to this question is easy, for it has been demonstrated through the administration of this legislation that federal supervision of the live stock markets is an essential function for the government to perform and that the benefits derived therefrom should not be confined to wartime only. For this reason, the Department of Agriculture considers it a duty to continue the work so long as the authority and the funds will permit, instead of discontinuing it as has been done in the case of numerous other wartime activities.

In order that you may understand more clearly our present situation, I will explain briefly the present status of the authority and funds which have enabled us to continue to function as we are doing at the present time. At the end of the fiscal year, which ended June 30, 1919, the appropriation of funds providing for various wartime activities, including this work of stock yards supervision, expired leaving the authority still in existence but leaving us without funds to finance its administration. Thru numerous and persistent appeals, however, from live stock producers, live stock shippers and other factors in the live stock industry whose familiarity with the beneficial results which had already come from this work, enabled them to determine its value, together with a recommendation from the Secretary of Agriculture, a special appropriation of $75,000 was provided in the bill making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1920. This amount was estimated to be sufficient to continue all supervision work until the peace treaty was ratified. At that time, however, it was thought that this important event would take place at some time during the present generation. It has developed, however, that no man knoweth the date thereof and our special appropriation is beginning to look small. We are preparing to discontinue all of this work except where it can be conducted in conjunction with other activities of our bureau where permanent offices are being maintained for the purpose of conducting our market report service.

It would be of no value and little interest to you for me to consume your time here in narrating the history of this wartime activity if it were a mere piece of temporary work, which upon its completion is to be forever consigned to the archives of the past. Such is not the case, however, for vast questions of enduring importance to the live stock industry have developed which must be dealt with in the future, and I can not think of a time or place at which a discussion of federal live stock market supervision could be more appropriate than at the present time before this body which represents the live stock industry in this great agricultural empire of the central west.

While, as stated before, the authority under which this work is being conducted is expected soon to expire and the funds provided to defray the expense of the work will be soon exhausted, it has been learned through the administration of this authority that there is a permanent service which it is incumbent upon the federal government to render to the live stock industry by exercising some form of supervision over the business transacted by the various factors at the central markets. It has been demonstrated, too, that the various agencies engaged in the business at the central markets are obviously benefited thru the exercise of a federal neutral agency with authority to adjust irregularities which are constantly coming up in the complex daily transactions of this great industry.

I feel it my duty to state, however, that in the central live stock markets, the live stock exchanges, traders' exchanges, co-operative and other organizations are doing commendable work in maintaining a high standard of ethics and promoting honesty among those who are engaged in the trade. I would not endeavor to minimize to any extent the benefits which come from the existence of these essential factors and it is thru co-operation with them that the government is enabled to secure the best results. Their aid has been found helpful even in dealing with factors not subservient to their authority and we have usually found them willing to assist.

It would be impossible to enumerate in detail the various adjustments which have been handled in the administration of those duties. A few representative instances, however, will acquaint you with some of the things which have actually been accomplished thru the application of this authority, and give some idea of the various abuses which the government can and should regulate under the proper authority, by exercising reasonable diligence.

It will be remembered by most of you that early in the year 1918 the president appointed a committee to investigate conditions and recommend a policy to be followed by the government with reference to the live stock and meat situation of the country. This committee consisted of the secretary of agriculture, the secretary of labor, the food administrator, the chairman of the federal trade commission, and the chairman of the tariff commission. Among the recommendations made by this committee was one to the effect that the government assume supervisory authority under the food control act by licensing all stock yards and all persons engaged in handling or dealing in live stock in or in connection with stock yards. Pursuant to this recommendation, the president issued a proclamation on June 18, 1918, which was supplemented on September 6, 1918, providing for this arrangement as recommended. General rules and regulations governing licenses were issued July 26, 1918, covering in a general way the practices which were considered contrary to a policy of right and justice. The secretary of agriculture was charged with the administration of these regulations and the chief of the Bureau of Markets was designated as the secretary's representative in their administration.

The Bureau of Markets was already represented in most of the live stock markets thru its market reporting organization and its representatives so engaged were immediately instructed to perform the additional duties of interpreting these regulations to the trade considering complaints from those locally affected by the regulations, making such local adjustments as were found to be within their scope of authority, and to coöperate with the various factors mutually interested in the maintenance of good service. A force of supervisors for all the other markets of the country was organized as rapidly as competent men could be found, and in a short time more than one hundred stock yards were licensed and arranged into districts, and nearly 400 commission firms, 800 traders, 100 order buyers, 250 packers, and over 1,000 concerns doing two or more of these classes of business had been licensed.

The relative importance of the various abuses which have come within the range of this authority varies, but many of them have been extremely serious when viewed from the standpoint of the live stock producer and shipper. Licensees have been found guilty of committing offenses as great as the theft of live stock, which, of course, resulted in a cancellation of their license. Making false returns to shippers on the part of one firm and the deliberate accumulation of a large profit from its feed account on the part of another resulted early last year in the distribution among live stock shippers of these two firms of approximately $38,000. There are now pending in the department about twenty-three cases involving a total of approximately $70,000, which amount represents the accumulation in feed accounts ranging from $1,000 to $13,000 in each case and covering a period of about sixteen months. These cases involve the markets at Chicago, East St. Louis, Kansas City, Fort Worth, St. Joseph, Sioux City and St. Paul.

There are six of these cases in Chicago in which the department after it had completed its investigations, reached the conclusion that there had been a violation of the general regulations governing licensees and that the money which had been thus acquired rightfully belonged to the shippers from whose accounts it had accumulated. The department realized that it did not have authority to enforce an order to restore these funds to their rightful owners and that its authority consisted only in the revocation of licenses, so that the conclusion was reached that the ends of justice would be more properly served and sufficient punishment visited upon the offenders if this money was prorated among the shippers consigning stock to them during the period covered by the investigations as had been done in a previous case involving this same question. Notices were sent to these firms extending to them such an overture, with a statement that the alternative would be the revocation or indefinite suspension of their licenses. Upon receipt of this notice, they sought the aid of the federal court and enjoined the secretary of agriculture from revoking their licenses or in any other manner interfering with their business until the matter could be heard by the court. At this hearing, the court overruled the department's motion to dismiss, but the department appealed from this decision. This appeal was recently dismissed and the department is now considering the whole matter with a view to taking such action as will be consistent with the views of the federal court.

In the several other cases involving this question of overcharges in feed accounts, hearings have been held and the evidence is being classified with a view to their disposition when the way has been made clear.

It is only fair to the large number of commission men who have not followed this practice to say that the number who have is comparatively very small, and we believe that the ultimate purpose of our efforts in this connection has been accomplished and that no substantial profits are being made from this source at the present time.

We are investigating some cases wherein it appears that there has been some creep in the feed inventory of stock yard companies. That is, it appears that they have sold more bushels of corn and more pounds of hay than they bought. We hope to reach the final completion of those cases before our authority expires.

The department in all its activities in connection with these cases has conscientiously endeavored to avoid doing anything which might result in an unjust injury to any licensee or any other person, but our line of duty was clear and we have endeavored to follow it without fear or favor.

Because of the interest which has been manifest, and because some misunderstanding has seemed apparent, I have gone a little more into detail in explaining the procedure which has been followed in these cases than time will permit me to do in cases involving the various other features of our work. Many of these are of no little importance, however, and I will refer briefly to only a few of the most representative ones. Inadequate facilities for handling live stock has been a subject of complaint at numerous stock yards, but the necessary equipment has been provided with reasonable haste wherever and whenever our supervisors found the complaints justified and brought them to the attention of the stock yards officials. New scales, additional pens, sorting alleys, loading and unloading docks, train chutes, and viaducts have been built and the movement of stock within the yards has been expedited thru improved arrangements. A better quality of feed has been furnished, dirty pens have been cleaned and necessary additional men have been employed. Closer check on feed has been made, faster service on terminal railroads has been furnished and numerous other features of stock yard service have been improved.

At one of the important markets unreasonable delays which were occurring daily in the movement of live stock from the terminal to the stock yards were resulting in great losses to shippers from shrinkage and other obvious results of such delays. Thru the activities of our local supervisor, this difficulty was promptly adjusted and a representative of the Washington office of the Bureau of Markets was advised a few weeks later by officials of the live stock exchange that this relief for which they had sought in vain for twenty-five yeras had already resulted in a saving to the live stock industry sufficient to pay the cost of conducting this supervision service for a period of one year.

At another market, a disagreement between the stock yards company and the live stock traders relative to the prices of feed recently resulted in serious congestion of feeder stock in the yards, due to a refusal of the traders to continue in business until the dispute was settled. Thru the intervention of representatives of the Bureau of Markets, the matter was arbitrated to the satisfaction of both parties. It was estimated that this tieup was resulting in actual money loss to shippers of several thousand dollars daily, as well as serious injury to the market.

At one of the important eastern markets previous to the beginning of this supervision work, all dead animals arriving with live stock shipments automatically became property of the city and the shippers received nothing therefor. Thru the efforts of our local supervisor, arrangements have been made whereby the shippers of such stock will receive prevailing dead stock prices for same.

At another eastern market, when our supervisor assumed his duties there, he found that a buyer for one of the packers was doing all the weighing at one of the scales. Of course, he interposed an objection and prevailed upon the stock yards company to provide a weighmaster who would not be subject to so much temptation.

It is thought that the beneficial service which it is possible for the government to render at the live stock markets, has been fully demonstrated, and it seems obvious that the public confidence which some form of permanent government supervision would tend to promote, is greatly to be desired. While it is not a part of my mission here to discuss legislation, it does not seem out of place to refer briefly to bills now pending in congress in which the question of federal supervision is involved. Much has been said, rumored, written, circulated and predicted about the agreement recently concluded between the big packers and the department of justice as a result of the efforts of that department to unpack the packers. It has been suggested that the impelling motive on the part of the packers in entering into this agreement was to head off the passage of this proposed legislation which provides for government supervision of their business, and the central live stock markets. But regardless of what might or might not have been the motive of the parties to this agreement, and regardless of any shift which may take place in the ownership of stock yards, such a shift would not obviate the necessity of competent government supervision of the live stock markets. The feature of this proposed legislation relative to the ownership of stock yards is of minor consideration when compared with the whole purpose of the bills, and while the effect of the arrangement whereby the packers are to dispose of their stock yards interests will doubtless be wholesome and beneficial, my personal opinion is, that if proper authority is provided and a competent supervisory organization is established and maintained, the purpose of this legislation can be accomplished regardless of who owns or controls the stock yards and the terminal facilities therein; for I am not yet ready to concede that the United States government is so subservient to the power of commercial influence that it can not promote and enforce proper regulations when authorized to do so under adequate legislative authority.

At this juncture, it would seem greatly to the advantage of all the factors involved in the live stock industry and interested in its future welfare and development for some form of permanent federal supervision to be provided. There is no doubt about the reassuring influence this would have among producers that they were getting a square deal at the central markets, and this is greatly to be desired regardless of the truth or falsity of the suspicion which has prevailed among them in the past that they were helpless victims of unfair dealing when they place their live stock on the market. As to the cost of such a service, it can be truthfully and conservatively stated that the actual money saving to the shippers and producers of live stock which has resulted from our supervision work since it started in July, 1918, has been several times the cost of the service.

Now that we have about reached the end of the great conflict which for some time has disturbed the tranquility of nations and the business progress of the world, there are vast problems of reconstruction to be met by all lines of industry. The farmer has no small number of these and probably the greatest among the problems which he has to face is the one involving the future of the live stock industry. For several years the increase in our production of meat producing live stock has not kept pace with the increase in our population. This is not only a problem of great concern for the live stock farmer but a serious question of public concern in which all classes of people are interested. In view of this and other considerations which have been already mentioned, it seems that some legislation should be enacted to the end that industrial peace may be restored to the live stock business, public confidence assured, and distribution guaranteed on an equitable and economic basis.

The Canadian government passed a law in 1917, known as "the Live Stock and Live Stock Products Act," providing for the permanent supervision of its live stock markets thru its minister of agriculture.

The leading European countries have for years exercised the closest scrutiny over the marketing and distribution of their live stock. Now that this country is a recognized leader in the family of nations in questions of international policy, it would seem only consistent with good judgment that some form of federal supervision should be exercised over the central markets thru which our most important food commodity is distributed. This would be the fulfillment of a public obligation, already too long neglected, to that class of individuals upon whose industry the whole world must depend for its food supply.

Discussion.

The Chairman: Just a minute, Mr. Bray! If there is any important question that is in the minds of you men, we will spend just a few minutes on this—say, five minutes. We cannot take up much time, but if there is anything that some member present has in mind that he would like to ask Mr. Bray, you may do so, as he directly represents the administration at Washington.

Member: I would like to know if it be possible to give us the names of those parties making those overcharges in feeds?

Mr. Bray: The investigations of those cases haven't been finally completed, and the department doesn't feel justified in appearing to unjustly advertise these matters. However, I will say that the cases in which the federal court action was involved at Chicago are a matter of record and they can be secured in that manner. I wouldn't like to place the department of agriculture in the position of taking advantage of an opportunity like this to probably, what might be considered, unnecessarily exploiting licensees who are under this war-time authority. While it might be all right, it is about a case of 50-50 per cent that it might not be all right, and I am sure that that kind of attitude on the part of the department of agriculture would at least be subject to some criticism because it would at least appear that the department was taking an undue advantage of its position in these matters.

Voice: I would like to ask Mr. Bray if this department is the only one that looks after this business of the stock yard?

Mr. Bray: No, sir; I believe I made that clear in my statement. I tried to, at least. I stated that we have found, and we haven't only found but it is a matter of record in the department of agriculture, and has been for all time, that the live stock exchanges and other exchanges, whose membership constitute the principal portion, I believe, of the commercial interests—I mean the commercial men—engaged in the business at the stock yards—the middlemen, in other words, are doing all that is within their power to promote honesty among their members. Now, it must be understood that there is a difference in the authority exercised over licensees, if you want to call them such, under the federal authority. There is some difference in the authority and some difference in the possibilities of rendering service to the live stock industry on that account. And there are factors engaged in the business at the live stock markets not subservient to the authority of these organizations which they cannot reach under any circumstances, and for that reason it becomes more apparent that a federal neutral agency existing with particular authority at the stock yards can work in co-operation with these organizations and do much to augment the work that these factors have exercised.

The Chairman: Mr. Bray, do you think it would have been possible for the live stock exchanges to have discovered these frauds that were being perpetrated on the shippers if the government hadn't taken over the stock yards and the exchanges under this war measure and put under government supervision as they were?

Mr. Bray: I couldn't say whether or not it would be possible.

The Chairman: Would it have been probable, then?

Mr. Bray: I think there was some difficulty with regard to the authority of the live stock exchanges to make some such investigation. Am I right about that, Mr. Stryker?

Mr. Stryker (Omaha Live Stock Exchange): With your permission, Mr. Chairman! Speaking for our organization, I want to thank Mr. Bray for the clearance given the Omaha market. We have absolute power and authority to investigate the books of any of our members where complaints are made of dishonest practices. If any shipper to the Omaha market—I speak of Omaha because I don't know in detail the rules of the other markets—if any shipper to the Omaha market feels that he has been aggrieved, he will come to me or my office and I will guarantee to show him every detail of every transaction with which he has been connected on the market, and if any irregularities show up, then our organization will punish, and punish more severely than can the Bureau of Markets, the derelict member. Unfortunately, we cannot keep everybody clean. There is a bad egg in many cases, and with them we do our best. We found a bad egg on our market a number of years ago, and the Bureau of Markets might have revoked the license of the firm. We did more than that, we expelled him from membership; we canceled their membership, and we have prevented any of our members from employing those expelled people. We don't propose to allow on our market any man who has been convicted of dishonest conduct, or to remain in business. Now, once more reiterating my answer to you, Mr. Bray, we have the machinery for investigating any complaint made either by the Bureau of Markets or any shipper to our market on any transaction occurring thereon, and we shall be glad to invoke the aid of that machinery wherever matters, or little bad spots, are called to our attention. (Applause.)

Mr. Stafford (Chicago Exchange): In answer to that gentleman's question—those two firms are out of business and always will be out of business, and no members of those firms are employed by any other concern. I want to say further that our exchange has the same machinery that Mr. Stryker tells you of Omaha.

I would like to ask Mr. Bray if he didn't find in the Chicago market a very substantial number of firms that their feed accounts showed a loss to the firm. I think there is a very substantial lot of them that did. I know of quite a number that did.

I would like to ask, also, if the Bureau of Markets revoked the licenses of those two firms that were expelled from the Chicago exchange.

Mr. Bray: In answer to the first question: The Bureau of Markets did find a loss in a number of firms' books on their feed, and as I said before, they found that a large number of commission firms were keeping their books straight and didn't make any profit from their feed account. And I wish to emphasize again that the number who have engaged in this practice are comparatively few.

In answer to the other question. The Bureau of Markets did not revoke the licenses of the firms accumulating the large overcharge in their feed accounts, for the reason as explained in my earlier remarks, that the Bureau of Markets had authority only to revoke licenses in that case and leave them go with all this money which they had accumulated, but the Bureau of Markets thought, as I stated before, that the ends of justice toward the people who had been injured would be more properly served if this money was prorated back to the people from whose accounts it had come. In doing that the Bureau of Markets divested itself of authority to revoke the licenses, but by continuing the combined supervision of the live stock markets the Bureau of Markets was assured, in co-operation with these other people, that they didn't do it any more.

I understand that the live stock exchange in expelling these people did the only thing that was in their authority to do, and I have no criticism, and so far as I know the Department of Agriculture would have no criticism of the apparent inconsistency in which the case was handled.

In the other case referred to where false returns were made to the shippers, as soon as the matter was brought to the attention of the firm that the Bureau of Markets was handling the case in the way that it was, and it was shown that our intention was to deal with the case until it was finished, this firm quit business immediately and surrendered their license, thereby rendering the Department of Agriculture powerless to revoke their license.

I believe that was the information you wanted, wasn't it?

Member: I would like to ask the gentleman, what is the difference between the nature of the cases of, we will say, Rappell

Brothers, for instance—we all know who it was—and these other five or six companies that have been expelled from the exchange?

Mr. Stafford: In the Rappell case it was a deliberate practice and had gone on for years, and the Bureau of Markets required them to return one year's profits. The other gentlemen, the Bureau of Markets found was the result of a practice that has been going on for years. In other words, you men require service; you require feed to be in the pens when your cattle come there. We order that feed and we can't always tell what you are going to use, and it has accumulated there in some of our cases to the extent of probably three to five cents a car or seven or eight cents, possibly, and that's the way that these accumulations have come about. There is no profit being divided by any of those concerns; it has been carried along there as a dead account year after year, and year after year. In the same way some of the firms show a loss there of quite a large amount. I could name several firms there that have fifteen or sixteen hundred dollars loss, some five or six hundred, and that loss has been caused in the same way as this profit that they may have; but there is no firm there, as I understand it, that has ever divided that profit; it simply stands there as a dead account which cannot be divided up; simply a system that has been there that we cannot—it is an account which the Bureau of Markets tells us cannot be kept absolutely to a cent straight. This one concern that we put out of business, we hired auditors and went back in their books just as far as we could find a book to look at, and returned about $18,000 to the shippers.

Member: Then the offense was really the same, only one man had accumulated so much and the other one had accumulated a great deal, is that the idea? What I am trying to get at is, did they both do the same thing?

Mr. Stafford: One firm did this wilfully—they acknowledged that was a way of making profits and meeting their higher expenses, and the other, as I say, was not wilfully.

The Chairman: Unless we as shippers make a complaint the exchange cannot investigate a member's books. Now, that was true with regard to both the gentlemen that were put out of the business because of crooked way of reporting returns, and also these other men. We didn't know that they were stealing from us, and not knowing that of course we could not report it to the exchange.

Member: Who found this out?

The Chairman: The Bureau of Markets, because they had the power to investigate these men's books without a complaint being made. They can do it without a complaint being made, and the other people cannot, and that's the difference between them.

The Secretary: Doesn't the exchange have the right to investigate any member on its own initiative, if any member of the exchange has reason to believe that some member is doing improper business?

Mr. Stafford: Yes, sir.

The Secretary: You say they don't need a complaint? My understanding is you don't need a complaint from anybody, do you?

Mr. Stafford: No, sir.

Mr. Bray: My purpose in asking Mr. Stryker to make that statement was with the view that he would make that clear. It comes to me that I might have directed that question to the secretary of the National Live Stock Exchange, but as Mr. Stryker happened to be right before my eyes, and he was beaming up there like a sunbeam, I couldn't resist the temptation to call on him to answer that question. In my statement relative to the difference in authority between the live stock exchanges and the Bureau of Markets, I referred directly to that particular feature that the Bureau of Markets has authority to go into the books and audit them to see whether there is anything wrong or not, while the live stock exchange comes to them only if there is something wrong with them or with their force.

Mr. Stryker: In answer to Mr. Wallace's point-blank question, and I am very glad we are talking these matters over just as we are, we have the absolute right, Mr. Wallace, if one of our members thinks that another of our members isn't doing just exactly the right thing he may come into my office and say, "Frank, investigate the handling of a certain proposition today; I am not satisfied with it," and I go and take it up carefully in every detail, and if there is anything wrong then our machinery takes hold of it. We think that is only as it should be, because only as we handle your business honestly and carefully are we deserving of your support and patronage.

Mr. White: Do you have to bring out the complaint then?

Mr. Stryker: No; any shipper or any member of the organization may come to me and ask me to have a transaction investigated. If nothing develops, nothing will be said; if anything develops that is not right, then the whole matter is washed out in open session.

The Chairman: Now, Mr. Ames, what I was going to remark has been already partly solved. I think all of us old shippers understand the conditions in the markets, and we know the live stock exchanges', both for feeders and the regular exchanges, attitude on such matters; but I also think that it is absolutely necessary for the shippers to have some disinterested party like the Bureau of Markets to investigate these facts there and bring them to the attention of the different organizations, for this reason, and it is a vital one: Rappell Brothers have had the reputation for the last twelve years, to my knowledge, of doing the things that they knew by rumor at least that an investigation should have been made, but it wasn't made until the Bureau of Markets investigated and brought it to their attention, and the exchanges should feel gratified because it relieved the individual members from doing it. You know how it is with regard to neighbors—you don't like to say anything even if you do know they aren't doing just right. It's just like that on the live stock exchanges; they are closely related and close together, and unless it is a very glaring offense you aren't going to get a member to inform on some other member, unless he is doing it in some peculiar, outlandish method, and for that reason it seems to me that the Bureau of Markets, if for no other reason, should be maintained to make an investigation and report to the various exchanges, and have them deal with the refractory member as I know they can do. The exchanges are doing a wonderful work in protecting the shipper—I don't think any of us feel anything different, but I do know we are better protected where an outside investigator can make recommendations to the exchanges and then the exchanges can themselves deal with and punish their refractory members. (Applause.)

Mr. Stryker: I don't want to take much time, but I do want to say this much, when the Kenyon-Kendrick bills were under investigation at Washington some of you secured a copy of the testimony given at those hearings, and I believe you will find in the testimony given by some of us that we said we had no objection to the government having supervision of our public markets for the very purposes you suggest, with the remedy of publicity where they have found anything wrong. I can but reiterate that statement this morning. You cannot harm us if we are right, and therefore we have no possible objection to such supervision from a Bureau of Markets.

Mr. Ames: Why is it, if the exchanges were so much in favor of the Kenyon-Kendrick bills not passed, why did they object to them so seriously if they didn't consider them detrimental legislation?

Mr. Stryker: Speaking once more for Omaha, and for Stryker, I would like to have the gentleman who asked the question look at the evidence given by our representatives when the Kenyon-Kendrick bills were discussed. You will find we said at that time what I have just reiterated this morning—we objected to certain features of the Kenyon-Kendrick bill then, we object to them today, or would if those features were in the bills, but since our objections were formulated many of the obnoxious features have been eliminated. We wanted your business handled in an expeditious and economical manner, and the major objections we made to the provisions of the Kenyon-Kendrick bills have borne fruit in an amended bill which has not in it most of the features to which we objected. We said we didn't care who owned the stock yards. Mr. Bray has just O. K.'d that statement. We said that the packers' cars shouldn't be taken away from them, and we objected to other features of the Kenyon-Kendrick bill, and most of them have been eliminated in the bill which has just been placed before congress.

Mr. Bray: In view of the questions that have been asked and the discussion that has taken place up to the present time, and I will finish in just a minute, I would like to say that in all of the activities of the Bureau of Markets in connection with this legislation we were following a prescribed course which congress had made it obligatory upon the Department of Agriculture, through the president's proclamation, to perform. We had no option as to whether we should do it one way or another, except where there was a choice between two courses, and in that case we could only take one course. We did this, but I want it understood, and I believe that Mr. Stafford will bear me out in this, that at no time, unless it may have been through misunderstanding, did we ever undertake to do anything or say anything in dealing with these cases which would indicate that we wanted to reflect upon the live stock exchanges or the functions of the live stock exchanges, or any lack of activity on the part of the live stock exchanges.

Mr. Stafford: That is absolutely true.

Mr. Bray: However, in performing these duties the Department of Agriculture felt that it was its duty to the live stock producers and shippers of this country to not play favorites whatever, which I am sure we haven't done, and not show any leniency where we find that none was due. It was our duty, as I said before, to deal with all these cases without fear or favor, and I believe that we have done that to the fullest extent. I also want to emphasize the statement that I made a while ago, that we have done all this with a view to avoiding any unjust injury to any person who might come within the authority under which we were acting.

I suppose the time is short, but if there is any other question I will be glad to answer it.

Member: I would like to ask if the Bureau of Markets holds the different stock yards companies responsible for the condition under which the stock are handled by the stock yards companies?

Mr. Bray: The Bureau of Markets exercises supervisory authority over the stock yards companies and any irregular method of handling stock which might result in injury, or which does result in injury, would be dealt with accordingly, when it was brought to our attention, either through investigation or complaint.

Member: I took up with Mr. Sykes in June a matter where I went in with the shipment of stock and was put off at Bensenville and my stock went on into the market. When I got around to see the stock, somewhere around nine o'clock in the morning, I found that some time during the night a double deck of hogs was put into a small pen, I suppose by the stock yards company, and there seems to have been no water in the pen, and as a consequence there was a bunch of dead hogs that I thought resulted from the carelessness of the stock yards company, and I had to stand the loss. I wondered if this Bureau of Markets would take cognizance of such a situation at the Chicago yards.

Mr. Bray: The Bureau of Markets handles just such things as that when they come to the attention of the supervisors who cover the entire yards every day, and they take them up with the stock yards company and correct them as far as possible.

The Chairman: At this time you are permitted to go right into the stock yards with your stock. If any train crew attempts to put you off, you just don't get off, that's all. That order has been revoked almost a year ago, that provided that the men weren't allowed to accompany their stock right into the yards.

I just want to say, in explanation of my own position, that we are not impugning the work of the live stock exchanges or criticising them in any way. We think they have got a lot of high-class men, men of honesty and integrity, in the live stock exchanges, and yet at the same time, as Mr. Sykes says, they get a bad egg among them occasionally and we believe that an outside party, created by and under the authority of the federal government, can straighten these fellows up much quicker than the live stock exchanges can, because of the fact that there are a lot of those things that we don't know are happening; the exchange members themselves don't know what some of their members are doing, but the Bureau of Markets can send a man right into their office and find out what they are doing.. There is a man attending this convention that was robbed of over $2,000 by that firm that made false reports on its returns, and he got over $2,000 back, and yet not a month before that was dug up I was with this gentleman on my way to Washington and we met in Chicago a representative of this very commission man—he came down and met us at the B. & O. depot, and arranged with this gentleman for a shipment of stock, and he thought this fellow one of his warmest friends. He arranged to ship him the balance of his hogs within the next ten days, and this firm even robbed him on this bunch of hogs also. (Laughter.) He hadn't the least idea that the man was stealing from him—he thought he was a high-class, upright, honest commission man. The live stock exchange hadn't any idea that he was doing that. Now, if the Bureau of Markets hadn't gone into that thing, how would this man have got this $2,000 back? Besides, a lot of men that weren't robbed of so much as that got a refund? That's the point I want to make in this whole matter. There are some things that the exchanges cannot go in and investigate, and we shippers don't know about them, but the Bureau of Markets can go into them and find out when crooked work is being done. We don't think it will reflect upon the man who is conducting his business in an upright, honest manner, but it will weed out these unscrupulous fellows.

We are going to call at this time our friend, J. L. Harris, and if we don't get through before lunch we will just continue afterward. There has been so much said about Mr. Harris that I won't take the time to introduce him to you, because you all know him, you have met him here, and as I said in my annual address, he is one of the men that we look on as a railroad man who is really the friend of the stockman. I don't know how we can pay a higher compliment to him than that.

ADDRESS BY J. L. HARRIS, UNITED STATES RAILROAD ADMINISTRATION.

Mr. Chairman, Members, and Gentlemen: I assure you that it affords me great pleasure to be with you, and I want to say that last year when I was invited out by your president I thought he felt sorry for me and wanted to get me out of Washington for a few days. The high cost of living and a few other things being responsible, got me out here and got me into trouble the first thing. (Laughter.) After I had met with the members of the association and they had told me some of your troubles, I couldn't imagine that all that had been said was true, and yet, after I got into it with Mr. Sykes and this committee that came to Chicago, I found not only that what they had said was true, but much more—the half had not been told.

I am going to ramble a little bit, remembering what Mr. Bray has just said, what Mr. Thorne said yesterday, and particularly a few things that I have in mind from knowledge and acquaintance at Washington, of which, in a measure, I want to warn you gentlemen. I have been in the live stock business all my life as a feeder and a shipper, and a railroad representative, and for the past eighteen or twenty months I have been in Washington trying to represent the best I could the people of the United States in behalf of the railroad administration. While down there I came in contact with our good friend Mr. Heinemann, meeting him almost daily, and I had the serious misfortune of rooming with him and eating with him during a part of this time, and I want to take this opportunity and chance of telling you that you have no better friend under the sun than Mr. Heinemann. (Applause.) He fought your battles every day and every hour in the day. I don't think there is a man today living that knows more about the rates and the application of the same, and the minimums and the various phases of handling live stock than he does. My work in Washington with the administration was that of trying to give relief to you gentlemen in behalf of the railroad administration. After we had completed a study of the rules which have been published and became effective in the month of December, I was retained by the railroad administration to do just such things as you gentlemen had already complained of, that is, namely, at Chicago we had a very nice family meeting and found you needed help. We held our meeting on a Friday and on Saturday telegraphic instructions were issued to all of the roads in the central west and northwestern regions instructing those gentlemen on individual lines—federal managers particularly—how to schedule their trains, how to save shrinkage and feed, and how they should arrive at the market points with a view of getting into and on the market by 8 a. m. Previous to the time this meeting was called and investigation made, the average was less than 45 per cent of the total receipts unloaded by 8 a. m., leaving 60 per cent to be broke out and sometimes not unloaded before 6 p. m. of that day, with the result that the inbound business of that day interfered with the outbound loading. Within a week after these instructions were issued, the average of the day's receipts unloaded and in the yards was 85 per cent—that was the lowest by 8 a. m., and we ran up where we averaged usually 90 per cent by 8 a. m., and in one or two days we got up to 99 per cent.

I don't think the stories I have just related are new to you gentlemen because you are shippers. Our work in Chicago was only limited. We went to St. Louis, Kansas City, Fort Worth and Oklahoma City and put in the same arrangements there, and I am glad to say that all of the markets except Chicago have lived up to the instructions better than Chicago has, although the cold weather and coal situation has been partly responsible for the late deliveries which is now complained of in Chicago. Instructions were also issued to all other markets in the United States, but principally primary markets, carrying out the same instructions given Chicago, although we didn't hold meetings at any other markets except those I have above mentioned.

With reference to distributing cars, we found on many occasions that Chicago, Kansas City, and other principal primary markets, were not able to furnish cars to the outbound business. It was almost a daily occurrence last fall, and only recently in this month, that I was compelled —as well as others at Washington—to give relief. We were advised in one case that a fellow had sixty cars of hogs bought on the Chicago market and had been waiting two days for cars, and his packing house was closed. Mr. Park of the exchange in Chicago and Mr. Heinemann, Mr. Mosher and Mr. Day are the principals representing the receiving and shipping interests, and I want to say in one case where there were probably five or six cars backed up waiting the cars to load out, I think it was about 1 o'clock that I got the message, and that night practically all of the live stock that was held over in the yards was moved out, and the next day it was cleaned up. I think you gentlemen realize that if you don't keep the market healthy, if the buyers of the east can not move their stock promptly to the slaughter houses, your stock coming in from the west will soon block up the yards and lower prices will prevail. It is to the shippers' interest, gentlemen, that the railroad administration is largely looking out for—to help you. Last fall a drouth was prevailing in Montana and Wyoming, Dakota and Idaho. I was sent by Mr. Chambers to St. Paul to attend a meeting. We found at that place that cattle were dying, sheep were dying, for want of water and feed. I went back to Washington with the traffic assistants of the central west and then of the northwest, and we recommended to Mr. Chambers to reduce the rates to the people affected by this drouth, with the view of moving the live stock to feed. We reduced the rate to one fare and a third to go and return home. We reduced the rate on feed into the drouth-stricken territories, we furnished cars at the expense of the other lines of the United States to take care of this situation, and I need not tell you gentlemen that cattle that are thin or sheep that have been driven great distances from the terriory in which they have had range to the shipping station are weak, no water and no feed, and unless you furnish cars promptly the death loss is heavy. We took 700 double-deck cars from the eastern territory and ran them into Montana. The frost and snow was beginning to fall, and you know what that means. We punished some of the eastern people, and we may have punished some of you gentlemen somewhat—I think perhaps we did. We found the same conditions prevailing in Colorado and Utah and Wyoming—a great shortage of double-decks. It would have been utterly impossible to have moved the great herds of sheep that were available for market from these long-haul districts to the market points in single-decks. If we had undertaken to move them in single-decks the whole country would have been swamped, it was so short of equipment, and so we robbed the eastern territory, we robbed some of the southern regions, the southwestern regions, and we ran cars out there as rapidly as possible, with the result that we cleaned the situation up pretty fair—not good. The next thing to be done was to ship cattle from Montana, Dakota, Wyoming and Idaho into Texas and New Mexico. Now, at that season of the year when everybody is shipping stock from the ranges and passes, taking stock cars out of their natural channels and moving them into Texas where they weren't wanted, robbed you gentlemen and everybody else in the territory from having a shuttle train service from the producing fields to the market, and it took a long time to get those cars back into the field of production.

I only make this explanation, gentlemen, to show you what the railroad administration tried to do to save the threatened live stock by furnishing equipment, and you gentlemen no doubt have had burdens just as serious to carry. I was talking with some gentlemen of your association this morning, and they explained that they had placed orders for cars a week more or less and then finally didn't get them, and then somebody said that Swift & Company came in and got some live stock and they got cars, and those men were wondering whether the railroad administration was responsible for that condition. I want to answer you as plainly as I know how. The railroad administration in Washington only acts in cases of emergency; they don't have the facts, nor can they intelligently instruct the federal manager or the superintendent in the distributing of cars on any individual railroad. The same men today are operating the railroads that operated them before the government took them over. I think Mr. Sykes is familiar with that.

And many of you gentlemen; but in cases of emergency, just as I just illustrated, we may take cars arbitrarily from one division or one region to another to help out and clean up where it is possible to do so.

I might go on and talk about cars and service indefinitely, but I am not going to take up any more of your time on that subject. I want to say as a friend that I think the time is here when you gentlemen should get closer to the packer, both big and little. He is the manufacturer of your product; you are the producer of the greatest commodity under the sun; you are entitled to be kept healthy and make a profit on your investment. That is also true of the packer. If he doesn't make money he won't buy your stock and manufacture it for the retailer who delivers it to the consumer. Everybody throughout the United States is cooperating, getting together, getting information, statistics and facts to protect his interest. I know of no interest today, gentlemen, so important as the live stock interest. It is largely your bread and butter; I don't know what Iowa would do if she didn't raise live stock.

I want to say a word about markets as I see the condition. It has occurred to me, from what I have heard said by Mr. Thorne and other speakers, and from what I know through bankers and various other sources, that we may look well into the future with a view of lower prices for live stock. That isn't encouraging, gentlemen, but the European market isn't healthy, and I need not dwell on that subject, but we are producing more meat in this country than it can of itself consume. The packers have, to my mind, many storehouses and warehouses full of meat laid in at a price with which you are all familiar. If the market should drop they have to take their loss just the same as you had. Therefore I say co-operation between these great interests, where you may know the facts, might be helpful.

There is one more thing that I want to mention, and that is capital and labor. We are all to some extent familiar with the strife. We take up the paper this morning and in large headlines we read what labor is doing in Washington—and they are doing it every day. Labor has its right and its value and should be protected—so should capital. There should be co-operation! I have always been greatly in favor of a co-operative board composed—or commissioned, if you please—composed of the men engaged in the line of work that they are representing. Most of us have been in the habit of working ten or eleven or twelve hours per day and putting in good long hours at that, getting up early and going to bed late, and taking a very short time for lunch. That's the life and history of a farmer and a feeder. Organized labor comes along and says, "Eight hours a day is as much as we think we should work," and he is late getting to his day's work, he is early getting off for lunch, he is late coming back after lunch and early quitting in the evening. In fact, he doesn't give you more than seven straight hours of work. In order to produce as much as this country can produce of labor and other commodities, I am inclined to think that the day is not far ahead of us when we will have to get back to a full day's work. (Prolonged applause.) The railroad administration is paying most of their employes who are members of organized labor from 50 to 100 per cent more than formerly. In other words, we are paying them about twice as much as we used to and getting safely one-third less work. You can think of that and see a great lesson right in there.

Now, we will go back again to the railroads. The railroads of the United States have, or did have in 1918, 90,000 stock cars, and less than 10,000 of them were double decks. You can figure bad orders and depreciation will run that down today to where 80,000 cars is as many as we can expect to find serviceable. The United States needs 120,000 stock cars to intelligently handle its live stock, and they need in addition to that about 700,000 other cars. We need from 10,000 to 20,000 miles more of double track, and I am going to tell you why.

The Secretary: You mean we need 700,000 cars additional to what we now have?

Mr. Harris: Yes, sir; we ought to have between 700,000 and 800,000 more cars than we now have available. Most of you gentlemen riding stock trains on single track railroads know what it is to get in on a sidetrack and wait for either a freight or a passenger train to pass you, and with the increased traffic in this country, due to the demands, the requirements have grown rapidly. Corporations have been organized within the last year to increase production so much that we are doing almost double the manufacturing we used to. It is not an uncommon thing for a corporation of $100,000,000 or $200,000,000 capital to be floated and put into operation. These people in different lines of work have got to have raw materials to manufacture; they must sell that manufactured product to keep their plant healthy, and if you don't have service to move these commodities you are going to go broke. You gentlemen know what it is to wait for stock cars. I am sure you will agree with me that the roads haven't purposely delayed you a day in furnishing a stock car, but it is because of a condition—the business has outgrown the facilities. If we had double track on all of these main lines running through Iowa and other states of the central west, how easy it would be to ship into Chicago and make the market without many hours loss, and shorten the service to market, and your delays in transit. The market terminals are not big enough, generally speaking, to handle the live stock when it arrives promptly. The Union Stock Yards in Chicago have about 300 unloading chutes, and it was stated during a recent conference a year ago this month, that from 200 to 300 cars per hour was their capicity, and I assume that about 225 would be the very top average. If more than fifty cars are taken in by one engine, the tracks only accommodating and spotting fifty cars with clearance, means that either one end or the other is hanging over and blocking other tracks, preventing trains back of it from getting into the chutes next for unloading.

Again, I want to say that the railroad crews delivering in the stock yards aren't very much interested in delivering cars in three minutes or three hours, or six or eight or ten hours, because they are running into overtime, which brings them time and one-half pay.

The facilities at most of our markets are limited and it would be a hard matter to increase those facilities without tearing down chutes, buildings, or something that has been put there in the way of a permanent fixture, so that the only solution I can see to divide the time and commence getting the stock in earlier in the evening so that it will all be unloaded by 6 or 8 or 9 o'clock in the morning. That was very thoroughly and clearly demonstrated during the meeting in Chicago.

Getting back to the railroad needs again, they need between 5,000 and 6,000 new engines, and the cost of all those new items of equipment, materials and new supplies, would mean between $3,000,000,000 and $3,500,000,000.

There is another thing that I had done before leaving Washington by the railroad administration which I know you gentlemen will appreciate—I know what it means to you, and that is the cleaning of stock cars. The cleaning of stock cars at this season of the year, in advance of the approach of hot weather, means the saving of much of your hog shipments in transit. The first hog that comes in a dirty car in a heated condition, when water is thrown on it, produces pneumonia and the hog dies. So all of our regional directors were advised that in order to prevent losses of live stock due to being shipped in cars that were unclean, that instructions be issued to roads in each region to clean stock cars by or before March 1st of the refuse that has accumulated during the winter months. This instruction was sent generally to the various regional directors.

I want to give you a few figures showing what the decrease was last year in receipts of cars at eleven of the principal primary markets. The decrease was 28,556 cars of stock. Most all of them showed a decrease except on a very few lines, as compared to the years 1918 and 1919. January of 1920, in comparison with January, 1919, shows a decrease on nine of the principal markets, of 11,855 cars. All of them showed a decrease except one market, which showed an increase of 473 cars. For the year 1919, in comparison with 1918, the receipts of sixty-three markets in the United States totaled 98,066,048 head of live stock. Total shipments were 40,756,050 head from the same markets; the stockers and feeders were 13,146,228 head; the slaughter were 56,938,681 head. All of the species of live stock showed a decrease except sheep, and they showed a substantial increase of 4,771,423 head, or 21.2 per cent increase.

Mr. Ames: With reference to double-tracking roads across the state and thereby moving traffic to our markets more readily —I live on the North-Western road, thirty miles from a double-track road. We have at the present time, and for the past number of months, to load our stock at two o'clock in the morning in order to get it on the market the next day. We used to load at eleven o'clock the same morning. Twelve miles west from me on the Great Western, a single-track road, they are at the present time loading, and have been all through the administration's control, at about ten o'clock in the morning—it's a single-track road. Now, I was wondering if we double-tracked the Great Western road, would that make those fellows load at two o'clock in the morning, just the same as we have to?

Mr. Harris: I don't know that I know enough about the time tables to intelligently answer your question. Offhand, I would say that during government control a great deal of traffic has been diverted from its usual channel, and, as I stated a while ago, the roads have handled more business and have had less jurisdiction over and less efficiency from labor. I think when we get back to private control and get started again, you may expect to find better service, but don't expect too much improvement for at least two months.

Mr. Ames: The point I tried to make was that the Great Western was loading six or eight hours later than we were and yet getting on the same market equally as good.

Mr. Harris: I know just what you have in mind and just what it means to you. It may be that the North-Western has so much traffic on its rails that it cannot do any better, or it may mean that they don't want to do any better.

Mr. Ames: You said if we had double track all over the state we would get to market faster. It wasn't on account of the war conditions that we had this trouble, because we have had it off and on for the last ten years. We live only thirty miles from a double-track road, and in no instance, where the train left at six o'clock on Sunday morning, was it necessary to load the evening before and make the stock stay in the car all night, in order to get it on the Chicago market on Monday morning. In no instance where we loaded at six o'clock and the car got out of town at eight o'clock, did the car get to the Chicago market later than ten or eleven o'clock on Monday, and that was before federal control of railroads; so that I don't see where there would be any advantage in double-tracking any of those roads. I think that is just a little thing to cover-up this income guarantee for the other fellow.

Mr. Anderson: On the Milwaukee road running between Sioux Falls and Sioux City we load our stock in Iowa and then ship to Canton and then down to Sioux City on the Sioux City to Sioux Falls road. On this road we have had great trouble in getting stock cars, and at the farmers' elevator there we have held hogs as long as two weeks before we could get cars, and I have it from a reliable source that at a gravel pit between Canton and Sioux City one man saw a bunch of stock cars, and to make sure he went in and counted twenty stock cars backed in at the gravel pit standing there and they all seemed to be perfectly all right and in good condition, and there they were standing there and we couldn't get cars. I would like to ask if it would have given us any relief to have reported such a condition as that?

Mr. Harris: We would have investigated and found out what the facts were. If they were as you have stated, the cars would have been moved if they had power to move them.

The Chairman: I would just like to say right here, in connection with this question that Mr. Anderson has brought up, that it is unfortunate that the members of this association do not have in mind the fact that they have an organization to complain to in just such cases as this, and that the officers of this organization know the men to go to to get relief if relief can be got. Now, we are not bidding for complaints at all, but we have tried to keep this before our people. I could stand here for a half hour and tell you of incidents just like Mr. Anderson has just reported here where the parties happened to think that maybe the Corn Belt Meat Producers' Association could help them out and they simply sent myself or Mr. Wallace a message or called us up over the long-distance telephone and told us the situation, and inside of forty-eight hours, invariably, the difficulty was relieved. Now, that's the situation. Of course, we know the ordinary shipper doesn't know where to go to get this relief—he isn't supposed to, he doesn't know the men in charge of these various conditions and how to get this thing, but if he just happened to think that he is a member of an organization that is officered by men who do know these things and that they invite him to make those reports to them, and complaints, and they will look after them so far as it is possible to do so, he should certainly not lose the opportunity thus given. I could cite you case after case where, as I have already said, just during the past winter, that has been done for members of the association in just such a scrape. They have reported to me and asked me if I could do anything for them, and inside of forty-eight hours, or seventy-two at the outside, there has been relief afforded to those people—simply because we knew the men to go to to take up the situation and make investigation and secure relief if relief could be got. That is just the difference between the individual and the officers of your association. I remember one special instance where one of our members called me over the long-distance telephone on Sunday afternoon and he said, "We're up against it here!" He said, "It just occurred to me that maybe you could help us out." I said, "What's the trouble?" "Well," he said, "we have got a bunch of hogs here that have been held for two weeks for cars and we can't get anything," and then he told about the congested condition there. I said, "I can try; that's what we are here for. I said I'd get busy and inside of three or four days, anyway, they would have some cars there to load the stock in. And so I immediately prepared a message and sent it to Mr. Aishton. Our town doesn't have a telegraph office open on Sunday, but I got hold of the operator and told him the situation and he got my message off, and in less than a week I received a letter from this gentleman who had called me up and he said "it wasn't forty-eight hours until we had all the cars we needed at our station." I received a message from Mr. Aishton saying that he had gone immediately after that situation out there and found it just as I had represented it, and instructed the people to furnish those shippers some cars. That's all there is to it! There are lots of times that such instances occur over the country. It is not intentional, or anything of that kind, but they simply happen, and if the matter is called to the attention of the proper officials we can get relief for you, because they don't intend that any community shall be discriminated against. It is their intention that all communities receive fair play in the distribution of cars, and they will see to it that those conditions are corrected when they are reported to them. So that, as I see it, while we are not bidding for work, or anything of that kind, we are always glad to help our members out if they only remember the fact that there is an organization that can do that. I was in Des Moines not so very long ago, and a friend of mine who is a member of this organization happened to see me and he said, "You are just the fellow I am looking for." He said, "Out in our town the boys are complaining; they have had cars ordered for I don't know how long, and there is stock that they want to see shipped out." He said that one man had some sheep that were getting so heavy that they wouldn't be salable if they weren't marketed soon. This happened to be on the Rock Island line, so I said, "We'll go right up to the Rock Island office and see what can be done," and we took it up with the Rock Island offices here in Des Moines, and within three or four days the whole situation was relieved and the people got sufficient cars to ship the stuff out. Instance after instance of that kind has come to our attention where we have actually given immediate relief to the shippers.

Now, what I was going to say, as Mr. Harris has said to you —pardon me for taking so much of your time—the time of government operation of these roads is very close to termination, we believe. That is, everything points that way—these roads are going back to private ownership. For instance, I can't take these matters up with Mr. Aishton or Mr. Holden at Chicago, who are regional directors of these lines, very much longer; we must go, then, to the men in charge of the various railroads, and that is another thing that we must bear in mind, that we must act and work properly and directly with the officials of the various lines, and in order to do this, of course, I believe you will get better results if you do it through men who are familiar and acquainted with these men—whom those men know and know the positions they occupy and the people they represent. If your complaints come in we will try to take care of you in the very best way that we can.

I just want to say another thing while I am on my feet about Mr. Chambers. Most of you haven't heard a word about Mr. Chambers. Mr. Chambers was made director of traffic under Mr. McAdoo's direction. It has been a year or two since I met Mr. Chambers occupying that position. I went to Washington two years ago—during those months when Iowa people couldn't get any cars at all—you people remember what the conditions were at that time—and I got acquainted with Mr. Chambers. That was my first acquaintance with him. I went to Mr. Chambers because he was director of traffic, and I found him to be a big man, a man that wanted to help us, and I stayed there some ten days or two weeks, and before we left we had things moving here, and we kept them moving until we got unloaded. Through the assistance of Mr. Aishton, who was then regional director of the entire Middle West, and Mr. Chambers, we got our stuff unloaded on a market which later broke and caused us a heavy loss. As I said, I didn't want to sit down until I had said a word of commendation for the splendid work that Mr. Chambers has done in Washington in behalf of the live stock interests in the Middle West here, along with Mr. Harris. At that time the office which Mr. Harris now holds hadn't been created—that's the committee for looking after the live stock interests. The live stock committee hadn't been created at that time and Mr. Harris wasn't in Washington, and wasn't put there until some months afterwards.

Now, I believe I have nothing more to say, and we are going to adjourn at this time to meet at 1:30 o'clock this afternoon. We want to meet the board of directors here immedaitely after we adjourn—both those who were elected last night and those who hold over. After lunch we will take up these other questions—a continuation of these live stock claims and other questions that affect your interests, together with the report of the resolutions committee. We don't want to forget that.

RESOLUTIONS.

Delegates to the sixteenth annual meeting of the Corn Belt Meat Producers' Association congratulate the members upon the increased growth and usefulness of their association. We note with satisfaction that receipts for the year 1919 were larger than in any previous year.

Never before was there greater need for an association of this kind. These are critical times for the live stock producer. In response to the appeals of the government, live stock production was greatly increased, notwithstanding the fact that prices for grains were higher relatively than prices for live stock. During the past year, the demand for meat products has not corresponded with the increased production, and as a consequence live stock producers generally have suffered heavy losses. These losses, together with the uncertain and most unsatisfactory railroad service and the violent price fluctuations have been most discouraging and are leading some to decrease their production or go out of the business altogether. Any general trend in this direction should be a matter of great concern to the consuming public, and for two reasons: (1) Greatly decreased production will within a comparatively short time result in prices much higher than they ought to be, and will make it difficult for the average family to purchase as much meat as is needed to maintain the highest state of health. (2) A decrease in live stock production will result in much more rapid exhaustion of the fertility of our soil, with consequent reduction in our yield of grains.

Iowa has lost less of the fertility of her soil than most other states, because we have fed most of our grain to live stock. The maintenance of our agriculture depends largely upon the continuation of this policy; but we can not feed our grain to live stock unless we can sell the live stock at prices which will pay as much for our grains as if we should sell the grains as grain. The farmer and stockman must secure for both grains and live stock prices high enough to return a fair interest upon the money invested, plus a fair profit for the labor expended, plus enough additional to maintain the fertility of our soil. Any less price will inevitably drive the young men from the farms to the cities and industrial centers, which offer greater rewards for their work, and will compel those who remain to rob the soil, upon which the preservation of our national life depends.

Therefore, the present unsatisfactory condition of the live stock industry should be a matter of national concern. All classes of people should lend their influence to the betterment of this condition. A freer consumption of meats which are low in price compared with other foodstuffs would encourage the stockman to remain in the business until the normal balance is once more restored.

In its work of securing satisfactory railroad rates and service, better marketing conditions, and in educating the public to the danger of the present situation, the Corn Belt Meat Producers' Association should have the moral and financial support of all of the farmers and stockmen of the state.

Whereas, The railroad service during the period of federal control was such as to cause tremendous losses to shippers by reason of delays and mishandling; and, Whereas, The adjustment of such claims has been delayed—and often seemingly wilfully—so that millions of dollars in such claims are now outstanding and will not be paid during the short remaining period of federal control; and,

Whereas, The President of the United States has proclaimed the termination of federal control and the return of the carriers to corporate control at the close of the present calendar month; and,

Whereas, In the event of such return without the necessary legislation to provide a fund for the payment of such claims or machinery for their adjudication by suit; and,

Whereas, No such funds will be available nor can suit be brought against the government after the termination of federal control, nor can the corporate companies be sued for acts or omissions during the period of federal control; therefore, be it

Resolved, by the members of the Corn Belt Meat Producers' Association, in convention assembled, That we do hereby urge upon the congress of the United States, that they take the necessary action to protect the shippers of the country by providing the funds under which voluntary adjustment of valid claims can be made, and to also provide the machinery by means of which suit may be entered and judgments enforced on such claims as will not be voluntarily adjusted; and that the text of this resolution be telegraphed to Iowa's senators and members of congress, and a copy of the resolution mailed in confirmation thereof.

Resolved, That the railroads should be turned back to their owners with the least possible delay consistent with justice to the railroads and to the public. Government operation has been most unsatisfactory to the farmers and stockmen, and we condemn both government ownership and government operation of the railroads as impracticable under present conditions. We condemn the so-called Plumb plan. We favor restoring the railroads to their owners, and restoring also the power of the Interstate Commerce Commission over railroad rates and practices, as well as the power of the various state railroad commissions and state regulations. We are opposed to government guaranty of earnings. If, after the railroads are restored to their owners, it becomes evident that they have become so badly crippled by war as to need financial aid, we favor such aid in the form of loans by the government, on such time and rate of interest as it may be found wise after investigation by the Interstate Commerce Commission, and on such security as will make government advances safe.

Resolved, That we go on record as favoring the establishment of an agency to which complaints on train service could be made direct, with a view to concentration of effort and control for the purpose of effecting immediate and general relief in any particular territory.

Resolved, That we condemn the practice of selling local stock yards scales to local stock buyers, which practice is being followed by at least one railroad in Iowa. We consider it the duty of the railroad to maintain satisfactory scales and stock yards at all shipping points as a part of their equipment.

Resolved, That our executive committee be directed to take such action as may be necessary to secure the payment of just claims for damages suffered through the negligence of the railroads; and, if necessary, they are directed to bring a case before the Interstate Commerce Commission to secure just rules and regulations.

Resolved, That we commend the action of federal agencies in arresting and deporting alien agitators who have been preaching disorder and violence with the purpose of overthrowing our established system of representative government. We condemn such agitators, whether aliens or home-grown, as unworthy of the privileges of this land of equal opportunities to all men. We favor vigorous action in dealing with those who refuse to work, and who spend their time in stirring up discontent and disorder by bare appeals to prejudice and by endeavoring to array class against class. Such men are parasites upon the producers of the country; they refuse to produce themselves, and constantly seek to hinder others from producing. We pledge our support to every effort which seeks to uphold our cherished American institutions and traditions and form of government.

Resolved, That we commend the efforts of government authorities to instill into the minds of our people habits of thrift and saving. We suggest, however, that opportunities for economy and thrift are so much greater in the congress of the United States and in the administration of government affairs, that education along this line should first be directed to these two agencies. It is important that individual citizens be taught the need of thrift, but it is doubly important that government officials both in the administration and in congress, should learn these lessons in the conduct of government affairs. Individuals can save in dollars and cents. Administration officials and congressmen and senators can save in terms of thousands of millions of dollars. Well-directed effort, therefore, should bring about vastly greater savings if concentrated in Washington, D. C. Lessons of thrift should be inculcated by example as well as by precept.

Resolved, That we note with satisfaction the remarkable growth of the Farm Bureau movement, which now has a membership of over 100,000 farmers in the state of Iowa. With this splendid foundation, and with the considerable sum of money which has been raised, there no longer should be difficulty in securing proper representation of farm interests both in the state and nation. We are proud of the effective help given to the Farm Bureau by so many members of the Corn Belt Meat Producers' Association. Now that the state Farm Bureau Federation has ample funds, we urge the executive committee, without delay, to establish a strong department of research and statistics under the direction of well-trained men. Such department should study conditions which influence production and prices, compile complete market statistics, and interpret same with reference to specific conditions as they exist from time to time, put out adequate publicity to meet unfair price drives, study home and foreign conditions of supply and demand, investigate probable competition from foreign countries, and, in general, gather information concerning everything that influences production, consumption and price. The purpose should be to bring about conditions which will result in just prices and stable production.

Resolved, That we commend the work of the Bureau of Markets in its collection of statistics concerning the marketing of live stock. But we repeat our request of a year ago, that these statistics be digested and condensed in such a way that they can be understood by the stockman and farmer, and that when this is done they be given more general distribution.

Resolved, That the increased attention given to economic problems by some of our agricultural colleges is to be highly commended. We repeat our recommendation of last year, that the economic departments of our colleges give special attention to research work and to price fluctuations, production costs and the function of our speculative markets.

Resolved, That we extend to Mr. J. L. Harris and Mr. C. B. Heinemann a vote of thanks for their splendid work in connection with the revision of the rules and regulations governing the transportation of live stock, and especially in connection with the protection of the allowance for shrink and the continuation of transportation of the caretaker for live stock.

Resolved, That the following officials and representatives of the United States Railroad Administration be given a vote of thanks for their efforts in improving the deplorable train service formerly accorded on shipments to and from the principal markets: Edward Chambers, director Division of Traffic, Washington, D. C.; Max Phelen, director Division of Public Service, Washington, D. C.; W. C. Tyler, director Division of Operation, Washington, D. C.; J. L. Harris, chairman Special Live Stock Committee, Washington, D C.

Resolved, That we are unalterably opposed to government ownership, operation or subsidy of merchant shipping. We favor such changes in our laws as will enable the ship owners of the United States to compete on equal terms with the ship owners of other countries. We especially condemn subsidies designed to encourage the importation of agricultural products from countries where land is cheap and the standard of farm living far lower than our own.

Resolved, That we strongly urge upon congress the appropriation of ample funds for the use of the United States Bureau of Crop Estimates, for the purpose of making monthly estimates of the numbers of cattle, hogs and sheep, and especially an estimate of feeding cattle and stock hogs likely to come to market during the following three months.

Resolved, That we consider the revised Kenyon-Kendrick bill for supervision of the packing industry as a measure which it is to the advantage of farmers and stockmen, the packers and the people generally, to have enacted into law at the earliest possible date. We request the senators and congressmen from this state to use every effort to secure prompt and favorable action upon this bill. We especially request Congressman G. N. Haugen, chairman of the house committee on agriculture, to endeavor to secure prompt and favorable action by his committee.

Resolved, That the members of the Iowa general assembly should give attention to the need of laws governing land tenure, which shall discourage the continual robbing of the soil by landlord and tenant.

Resolved, That we favor the establishment of a Commission of Agriculture in Iowa, which shall co-ordinate the work of the various departments which have to do with the agricultural activities of the state.

Resolved, That the farmers of Iowa are quite competent to administer hog cholera serum both by the single and double treatment, when given two or three days of training under competent instructors. We condemn every effort to confine the administration of serum and virus to veterinarians, and we demand of the Commission of Animal Health immediate action which will result in enabling farmers who have taken proper instruction to secure certificates authorizing them to administer serum.

Resolved, That the manufacture and handling of serum at the State Agricultural College should not be wholly abandoned, but should be maintained as a check against exorbitant prices for serum which may be charged by individual companies.

Resolved, That the laws in Iowa governing the manufacture and sale of hog cholera serum do not afford protection to the farmers who purchase such serum. These laws should be very carefully revised in order to give adequate protection to purchasers.

Resolved, That we condemn in the most emphatic manner possible the efforts of Attorney General Palmer and others in authority to beat down prices of agricultural products. Such efforts have cost the farmers of the country millions of dollars, and have not benefited the consumers. The farmer and stockman is willing to bear his share of any necessary loss resulting from the return to pre-war conditions, but is not willing to suffer tremendous financial losses which benefit only the speculators. We are of the opinion, now that the war is over, all prices should be permitted to seek their proper level in accordance with economic law, and we look upon any effort of the government to interfere with economic laws as being mischievous and harmful to the people of the country, and especially to the consuming public.

Resolved, That we demand that the activities of the Food Administration be discontinued at the earliest possible date consistent with the keeping of government pledges to the producers of the country.

Resolved, That industrial disputes between employers and employed are a constant menace to the property and well-being of the public. When such disputes result in strikes or lockouts which interfere with transportation or distribution of agricultural products, they cause farmers and stockmen wholly unnecessary losses, which at times amount to millions of dollars, and which may interfere seriously with adequate production of farm products. The time has come when such disputes in necessary industries must be settled by conference or arbitration, and without resort to the strike or the lockout. We demand, therefore, that our representatives in congress use every effort to secure legislation which will provide for fair and just arbitration of disputes between employers and employed. When such provision is made to insure justice to labor as well as to capital, we demand that strikes and lockouts in such necessary industries shall be prohibited by law. Production of food products can not be carried on in sufficient volume if farmers and stockmen must live under continual threat of industrial disturbances which prevent them from marketing their products when they are ready for market.

Resolved, That in the death of David Muir and D. W. Anglum, the Corn Belt Meat Producers' Association has lost two of its most active and useful members. Both of them have been active in the affairs of the association from its beginning, and have contributed very much to its success. We extend to the families of these deceased members our sincere sympathy.

FRIDAY AFTERNOON.

The session Friday afternoon was devoted to hearing addresses from a number of visitors from the Chicago, Omaha and Sioux City stock yards. Among those who spoke was A. F. Stryker, secretary of the Omaha Live Stock Exchange. Mr. Stryker spoke of the methods they had followed satisfactorily in handling claims for shippers to that market.

H. P. Park, traffic manager of the Chicago Live Stock Exchange, made an interesting talk on the methods followed at that point in handling live stock claims. Among other things he spoke of methods of reducing the number of claims through greater care in shipping. He said that many shippers of hogs had used ice in hot weather with good effect, the practice being to suspend from the roof of the car four to six gunny sacks, each containing fifty pounds of ice. Other shippers reported good results from scattering ice over the floor of the car and in the ends and center. He emphasized the importance of proper bedding in hot weather, and said shippers should insist upon railroads furnishing clean cars, which should then be bedded with four or five inches of clean sand. If sand is not available, clay makes a very good substitute. The bedding as well as the sides and roof of the car should be thoroughly drenched with water, so that the cars are in nice, cool condition at the time of loading. He cautioned against overloading.

C. B. Heinemann, secretary of the National Live Stock Exchange, recommended the claim department being conducted by Mr. Park and Mr. Stryker. He thought there should be closer co-operation between the stockmen, the commission men and the packers. He said the job of the National Live Stock Exchange was to promote harmony.

R. E. Whitlock, of the Sioux City exchange, spoke of his past experience in farming and his later experiences in marketing. He told some entertaining experiences. He said that an occasional stockman tried to get the better of a commission firm, but the vast majority of them wanted what was right.

John W. Coverdale, secretary of the Iowa Farm Bureau Federation, expressed the desire of the Farm Bureau to co-operate with the Corn Belt Meat Producers' Association in every way possible.

T. W. Ingwerson, of Swift & Company, Chicago, spoke of the close relations which exist between the packers and the stockmen, and of the desire of the packers to do everything possible to make the live stock business profitable to the producers. He expressed the hope that the work begun by the Producers' Committee of Fifteen might be continued.

Secretary Henry C. Wallace emphasized in a general way the importance of maintaining the Corn Belt Meat Producers' Association and extending it still further. He thought that possibly the time might come when the Farm Bureau could take over some of the work the association has been doing, but that until it was fully equipped to handle it, the interests of the farmers and stockmen of Iowa absolutely demanded vigorous work on the part of the Corn Belt Meat Producers' Association.

The chairman closed the session by emphasizing the importance of extending our membership, and the annual convention adjourned.

REPORT OF THE ASSOCIATION REPRESENTATIVE OF THE IOWA BEEF PRODUCERS' ASSOCIATION FOR 1919.

The work of the association during 1919 was somewhat hampered because of the changing of the field man. Mr. Allender was the representative for the first four months of the year. Mr. Tomlinson again took up the work in April and carried it until the first of July, when he resigned to take a position with the Extension Department, and I was appointed.

This changing about has hampered the work more or less and, coupled with it, we have had the Farm Bureau Federation and membership drives, which have been going on practically all fall, and during the winter, up and until now. The last named has interfered more seriously of the two, but now that it has let up, the work is pushing forward. The most serious thing which resulted from this condition, in so far as our work directly is concerned, is the fact that it cut down the number of counties where baby beef club work was put on. However, there was a total of 519 calves started in this club last fall, with 390 boys and girls feeding, as against 443 calves and 316 for the year previous, an increase of 17.1 per cent.

The rules for the 1919-20 club have been changed as follows:

IOWA BOYS' BABY BEEF CONTEST, 1919-20.

REGULATIONS.

1. Members: Any junior over 10 and under 19 years of age January 1, 1920, is eligible.

2. Work: Each member will choose a calf dropped between January 1 and September 1, 1919. It may be selected any time after the member enrolls, but the feeding record does not begin before October 1st. .Sometime between October 1 and October 30, 1919, the calf will be weighed and then accurate record of feeding will be kept. Where more than one calf is fed in a lot, the average amount of gain and the average amount of feed eaten will be accepted, providing all the calves are entered in the contest.

3. Selection of calf: The purpose is to feed calves for market beef. Pure-bred calves may be used, but bull calves and all heifers intended for breeding purposes are barred.

4. Feeding period: The feeding record is to begin the day the calf is weighed between October 1 and October 30, 1919. The county leader or two persons unrelated to the contestant must witness the weighing, and sign the weighing certificate, and the contestant must report at once weight, color, age, sex and breed of calf. The calf will be weighed again in August, 1920. Each member will make monthly reports as required and final report not later than September 1, 1920.

5. Instructions: Instructions relative to selection, feeding and caring for baby beef calves are sent to each member. He will get all the information he can and then decide upon his own method of procedure and follow it carefully.

6. Basis of award: The following basis of award is used:

Individuality of calf at county show	70%
Rate of gain	15%
Feeding results and records kept	15%
	100%

7. Prizes: With the same calf the members may compete for international, interstate, state, county and local prizes.

8. Exhibits: In counties where prize trips are offered, members must exhibit their calves at local or county show to be placed and graded on the percentage basis. In case the calves are exhibited and sold at the state or interstate fairs before the local county fair is held, the placing and grading may be done at the state show if all the eligible calves are shown. No county prizes will be awarded except in counties where regular clubs are organized and provision is made for grading on the above basis. Enrollments may be made by eligible juniors in counties where no regular club is organized. Such enrollment and compliance with the club regulations will entitle the member to show his calf in the baby beef special classes at the state, interstate or international shows. State champions will be picked at the Iowa State Fair on the same basis as in the county shows.

9. Enrollments: May be made with the local or county club leader or county agent at any time before November 1, 1919. In counties having no county club, enrollments may be made direct to the state club leader, Ames, Iowa.

County	Total Boys	Calves	Short-horns	Here-fords	Angus	Cross-breds
1. Cass	15	15	---	---	---	---
2. Dallas	3	6	---	---	6	---
3. Washington	14	14	5	4	5	---
4. Marion	9	9	5	1	3	---
5. Madison	8	14	---	---	---	---
6. Harrison	5	5	3	2	---	---
7. Wapello	36	80	10	10	40	20
8. Johnson	10	15	8	5	2	---
9. Woodbury	15	20	13	3	2	2
10. Sac	49	53	---	---	---	---
11. Allamakee	8	9	8	---	1	---
12. Calhoun	4	4	---	---	---	---
13. Grundy	13	17	5	7	4	1
14. Iowa	1	1	---	---	---	---
15. Shelby	1	5	5	---	---	---
16. Louisa	6	9	3	---	6	---
17. Story	3	3	2	---	1	---
18. Poweshiek	17	28	2	5	15	6
19. Mahaska	6	6	2	---	2	2
20. Wayne	2	2	---	---	---	---
21. Pocahontas	4	5	4	---	---	---
22. Buchanan	29	29	27	---	---	---
23. Tama	15	15	5	5	4	1
24. Muscatine	19	26	12	9	5	---
25. Marshall	63	83	37	8	20	5
26. Monona	2	4	4	---	---	---
27. Greene	2	2	1	---	1	---
28. Cherokee	17	17	---	---	---	---
29. Van Buren	14	23	11	---	12	---
Total	390	519	172	59	129	37
Last year	316	443	---	---	---	---
Increase	74	76	---	---	---	---

The Baby Beef Club for the year 1918-19 was a pronounced success; and, at the state fair of 1919, we were able to have 174 calves shown in the boys' and girls' special classes by 148 boys and girls, which was the largest class ever judged at the Iowa State Fair. Thirty counties were represented, Muscatine county again leading with 23 calves, Van Buren following with 14 calves.

In the open classes, 21 members of the club won prizes amounting to $460, or a total amount of prizes amounting to $1,477.

RESULTS OF THE AUCTION SALE.

One hundred twenty baby beeves were sold at auction, and four at private sale. John Morrell & Co. purchased 39; Armour Packing Co., 23; Iowa Packing Co., 20; Swift & Co., 17; Wilson & Co., 21.

The total weight of calves sold at auction was 124,220 pounds. Total amount brought by the sale was $22,727.95. The top bid was $21 by the John Morrell Co. The calves averaged in weight 1,018 pounds, and were sold at an average price of $186.29 per calf, or $18.20 per 100 pounds.

REPORT OF THE BABY BEEF CLUB EXHIBIT.

INTERSTATE FAIR, SIOUX CITY, 1919.

Thirty Iowa Beef Club members exhibited 41 baby beeves at the Interstate Fair at Sioux City, representing six counties.

Philip Hegstrom, of Lawton, Woodbury county, won first place with a pure-bred Aberdeen Angus steer. He won $30 in the baby beef special class and sold his calf to the Martin Hotel for $25 per hundredweight, which was the highest price bid at the auction sale.

RESULTS OF AUCTION SALE.

The total weight was 38,160 pounds. Total price paid was $6,355.75. The average weight per calf was 930.75 pounds. The average price per calf was $149.48, or $16.06 per hundred.

PURE BRED CLUBS.

Another piece of work which the association has pushed strongly, and which bids fair to eclipse the record made by the Baby Beef Club, is the pure-bred club. Of the clubs of this kind, which have been put on in various parts of the state, all but one or two have been highly successful, and the reasons for the poor showing made by this club were poor management, lack of care given the calves, and lack of interest on the part of both the boys in the club and the people in the community.

At present, there are nine clubs with whom I have come in personal contact, and there are a few more of whom I have no account. The total number of animals in these clubs is three hundred thirteen. The summarized statement is as follows:

SUMMARY OF PURE BRED CLUBS.

SUMMARY OF PURE BRED CLUBS

County	Total Boys	Calves	Short-horns	Here-fords	Angus	Average Price Paid
Story	35	35	--	-------	35	$260
Louisa	69	69	27-$325	36-$200	6-$190	248
Plymouth	34	37	37- 190	------	------	190
Cedar	43	43	------	------	------	161
Wapello	10	10	------	------	-------	80
Fayette	20	20	20- 140	-------	-------	140
Black Hawk	39	39	------	------	------	---
Franklin	26	26	20- 130	6	------	-
Floyd	34	34	21- 175	9- 255	4- 200	199
Totals	310	313	------	------	-------	- -

The pure-bred club is undoubtedly the coming club, in so far as beef clubs are concerned; because it teaches the boy both the feeding and care, and also the financial side as well. However, the available supply of females suitable for the various clubs will always be a limiting factor in the expansion of this work.

The pure-bred heifer club is the most popular just at present, but has this objection; it tends to make a speculator, and not a breeder. On the other hand, the bred heifer and cow and calf clubs make breeders, because the boy actually sees the increase and doesn't have to be satisfied with hearing someone else talk about it.

OTHER WORK CARRIED ON BY THE ASSOCIATION.

During the spring, assistance was given men buying bulls and other breeding stock. This was done by Messrs. Allender and Tomlinson.

The fore part of the year, a booklet dealing with pure-bred clubs was put out and distributed. During the year about five thousand booklets and pamphlets have been distributed.

Owing to the demands made upon the Animal Husbandry Extension Department, the representatives have assisted them by addressing institutes and short courses and in various other ways.

During August, September and the fore part of October, the field man was called upon to judge fairs; some ten of which were judged.

Other work, such as Breeders' Association organization, live stock shipping association organization, and meetings, have been attended and addressed by the representative.

Some fifteen hundred letters, dealing with the work, have been gotten out during the year.

Such other work, as managing the Baby Beef Sale at the state fair, assisting with the Junior show at the International, assisting in the cattle department at the state fair, coaching county junior judging teams, farm visits and farm tours have been made by the representative.

FUTURE WORK OF THE ASSOCIATION.

At the present time, the field man has gathered together information, pictures, etc., to put out a pamphlet on the showing of beef cattle, with especial thought to the needs of the small breeder and amateur who is just beginning, or who wishes to show at the county fair.

Material is being gotten together from the different club leaders in the state with the idea of putting out another booklet dealing with both the pure-bred and baby beef clubs, as the edition put out by Messrs. Allender and Tomlinson is practically exhausted, and there have been some changes in organization made since that time which warrant another booklet dealing with this line of work.

A collection of photographs of representatives of the different breeds of beef cattle, carload lots, steers and cuts of beef has been collected, and two sets of slides for lecture work are being made at this time. There has been a repeated call for pictures for schools and these slides will meet this need and can also be used in lectures to give the producer a clearer idea of what is wanted in a beef animal.

At the present time, the co-operation of the county agents in the state is being solicited to the end of getting a line on the surplus pure-bred stock for sale, this list to be printed and sent throughout the south and west with an idea of getting more buyers into the state, and also knowing where the stock can be located. The response from the county agents, however, has not been as good as desired.

Another piece of work has been talked over with Mr. Evans, of the State Dairy Association, and Mr. Beresford of the Agricultural Extension Department, but concerning which no set policy can be agreed upon; and that is a better sire champaign. More men are doubtless using pure-bred bulls today than ever before, but, at the same time, there are those with whom a bull is a bull, and that is about all that is necessary. After all that has been written and said concerning the scrub, it seems that these men are beyond all hope, but there is another man with whom we should bargain, and he is the man who uses a pure-bred bull, but, so long as he is pure-bred, doesn't bother about the individuality. The case of the first man is one of pure indifference, but the second man should be shown wherein he fails in his purpose, and just what method to follow in going about this has been the question which has been bothering us. However, it seems very probable that publicity, through the county agents, and personal work to the end of interesting a few more progressive farmers and later working through them, would help to solve this problem, and will be done wherever an opening presents itself.

PART VIII

Annual Report of the Iowa Weather and Crop Service Bureau of 1919.

CHARLES D. REED, Director

For convenient reference and comparison with past and future years, this report contains the summaries of the monthly and weekly bulletins of the Iowa Weather and Crop Service in co-operation with the Weather Bureau of the United States Department of Agriculture for the year 1919.

Late in the year 1919 co-operation with the Federal Government was extended to include the Bureau of Crop Estimates, U. S. Department of Agriculture, through its Iowa Field Agent, Mr. Frank S. Pinney, in the collection of acreage, condition, yield and other crop statistics. The revised acreage table and final tabulated crop summary herein published are the result of this co-operative effort.

The effect of the weather on crops will, as heretofore, be published in co-operation with the United States Weather Bureau.

The regular meteorological, climatological and crop statistical work was maintained with more completeness and efficiency than in 1918, though the general condition of unrest among the people caused many persons to cease co-operation with this service and more than usual difficulty was experienced in finding co-operative observers.

Publications were distributed as follows: Monthly Climatological Data, about 17,000 copies; Weekly Weather-Crop Bulletins, about 20,000; Daily Weather Forecast Cards, to 1,514 addresses; and Rural Delivery Slips to 814 addresses. Five hundred copies of the monthly reports are distributed each month through the United States Department of Agriculture Weather Bureau to scientific institutions and libraries in this and foreign countries.

Daily weather forecasts were distributed by telegraph at the expense of the U. S. Weather Bureau to 82 towns. From these towns the forecasts are made available by free telephone to 132,544 subscribers, largely rural.

Frost warnings are sent when necessary during the fruit blooming season to all orchardists in the State prepared to use orchard heaters and who make application in advance for the service.

Increased transportation by automobile and motor truck has created a great demand for information as to the condition of roads. From April 1st to September 30th, daily rainfall reports are telegraphed at the expense of the U. S. Weather Bureau from 26 Iowa towns to the central station at Des Moines. Many local and long-distance calls are answered as to desirable detours to avoid wet areas. A special Highway Weather Service was begun late in the year by the U. S. Weather Bureau Office in Charles City.

CLIMATOLOGY OF THE YEAR 1919.

The mean temperature, 48.6°, is 1.2° above normal. January, February, March, June, July and September were above normal; the other months below. The highest temperature recorded was 104° at Webster City on July 30th and Keosauqua on July 31st. The lowest was -36° at Thurman, on December 10th. The period, December 1, 1918, to March 31, 1919, was milder than any other similar period of record; and the period, February 1st to April 30th, was wetter. The total precipitation averaged 36.76 inches, or 4.79 inches above normal.

Spring work was backward; grasses and winter grains made luxuriant growth. Wheat was seriously damaged by high temperatures and high humidities in June. Harvest and threshing were early. Potatoes were practically a failure, due to hot, dry weather August 14th to September 17th. Corn husking was delayed by wet weather in the latter part of September and October.

Barometer (reduced to sea level). The average pressure of the atmosphere for the year was 30.04 inches. The highest pressure was 30.98 inches, at Keokuk, on December 10th. The lowest pressure was 28.96 inches, at Omaha, Neb., on February 13th. The range for the State was 2.02 inches.

Temperature. The mean temperature for the State was 48.6° or 1.2° above the normal. The highest annual mean was 53.2°, at Keokuk, Lee County. The lowest annual mean was 45.3°, at Britt, Hancock County, and in Clayton County near Postville. The highest temperature reported was 104°, at Webster City on July 30th and Keosauqua on July 31st. The lowest temperature reported was -36° at Thurman, Fremont County, on December 10th. The range for the State was 140°.

Precipitation. The average amount of rainfall and melted snow for the year was 36.76 inches, or 4.79 inches more than the normal, and 3.98 inches more than the average for 1918. The greatest amount at any station was 48.16 inches, at Creston, Union County, and the least amount was 26.88 inches, at Britt, Hancock County. The greatest monthly precipitation was 12.25 inches, at Alta, Buena Vista County, in June. The least amount was a trace, at several stations in January. The greatest amount in any 24 consecutive hours was 5.52, at Grinnell, on September 30th. Measurable precipitation occurred on an average of 95 days, 3 days more than in 1918 and 10 days more than normal.

Snowfall. The average amount of snowfall was 26.6 inches. The greatest amount reported from any station was 44.5 inches at Sioux Center, Sioux County, and the least amount was 7.1 inches at Keokuk, Lee County. The greatest monthly snowfall was 18.0 inches at Sibley, Osceola County, in February.

Wind. The prevailing direction of the wind was from the southeast. The highest velocity reported was 63 miles an hour from the southwest at Keokuk, Lee County, on November 10th.

Sunshine and Cloudiness. The average number of clear days was 169; partly cloudy, 94: cloudy, 102: as against 173 clear; 97 partly cloudy, and 95 cloudy days in 1918. The average percentage of the possible amount of sunshine was 59 or about 2 per cent less than the normal.

MONTHLY SUMMARIES.

JANUARY.

The mean temperature, 26.8°, is the highest of the 30 Januarys of state-wide record, the excess in temperature being about 14 degrees in Emmet county in the north and about 4 degrees in Wayne county in the south. The first five days were severely cold with temperatures as much as 30 degrees below normal; the last 16 days were remarkably mild, several days being more than 20 degrees above normal.

This was the driest January of record. Most of the precipitation occurred in the snowstorm that was in progress at the close of the preceding month, though small, scattered amounts occurred, 4th-7th and 20th-23d. The number of clear days, 20, is the greatest record in January. The snow covering disappeared in the Missouri slope counties by about the 8th but persisted till the 21st-24th over a belt extending from Keokuk and Washington counties northeast over Clayton and Dubuque counties. The ground was not deeply frozen at any time, and during the last week very little frost remained in the ground, plowing was done, shrubs were set out and dandelions bloomed and formed their white seed balls. Buds were much swelled and some fear is entertained for their safety. Maple sap ran for a few days. Winter wheat is believed to be in good condition, though there were some adverse reports of heaving due to alternate freezing and thawing. Practically no ice has been harvested. Brisk marketing early in the month was prevented by bad roads after the 15th. Building was unusually active for January.

Pressure. The mean pressure (reduced to sea level) for the state was 30.10 inches. The highest recorded was 30.65 inches, at Omaha, Neb., and Sioux City, on the 3d, and the lowest was 29.68 at Sioux City on the 24th. The monthly range was 0.97 inch.

Temperature. The mean temperature for the state, as shown by the records of 102 stations, was 26.8°, or 8.9° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 25.2°, or 10.6° higher than the normal; Central, 27.0°, or 8.8° higher than the normal; Southern, 28.2°, or 7.3° higher than the normal. The highest monthly mean was 31.9° at Omaha, Neb., and the lowest monthly mean was 22.4°, at Northwood. The highest temperature reported was 64°, at Centerville, on the 19th, and the lowest temperature reported was -32° at Maquoketa on the 4th. The temperature range for the State was 96°.

Humidity. The average relative humidity for the State at 7 a. m. was 86 per cent, and at 7 p. m. it was 76 per cent. The mean for the month was 81 per cent, or about 1 per cent lower than the normal. The highest monthly mean was 87 per cent, at Charles City, and the lowest was 78 per cent, at Keokuk.

Precipitation. The average precipitation for the state, as shown by the records of 110 stations, was 0.24 inch, or .81 inch less than the normal. By divisions the averages were as follows: Northern, 0.31 inch, or 0.52 inch less than the normal; Central, 0.22 inch or 0.89 inch less than the normal; Southern, 0.19 inch, or 1.00 inch less than the normal. The greatest amount, 0.86 inch occurred at Nora Springs, and the least, a trace at Chariton, Mt. Pleasant, Olin, Tipton, Stockport and Winterset. The greatest amount in any 24 consecutive hours, 0.62 inch, occurred at Nora Springs on the 1st.

Snow. The average snowfall for the state was 2.8 inches or 4.1 inches below the normal. The greatest amount, 12.2 inches, occurred at Lansing, and the least, a trace at six stations.

Wind. The prevailing direction of the wind was from the southwest. The highest velocity reported from a regular Weather Bureau Station was at the rate of 42 miles per hour from the northwest at Sioux City, on the 4th.

Sunshine and Cloudiness. The average percentage of the possible amount of sunshine was 68, or 18 per cent higher than the normal. The percentage of the possible amount at the several regular Weather Bureau stations was as follows: Charles City, 55; Davenport, 64; Des Moines, 73; Dubuque, 64; Keokuk, 76; Sioux City, 75; Omaha, Neb., 71. Clear days average 20; partly cloudy 5, and cloudy 6.

Miscellaneous Phenomena. Aurora, 1st, 3d, 4th. Fog, dense, 11th, 12th, 15th, 18th, 19th, 20th, 21st, 22d, 23d, 24th, 27th. Halo, lunar: 6th, 9th, 10th, 11th, 13th, 16th, 18th. Halo, solar: 1st, 2d, 8th, 11th, 17th, 18th. Parhelia: 1st, 2d, 8th, 13th.

COMPARATIVE DATA FOR THE STATE—JANUARY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	19.7	+ 1.8	61	—27	2.03	+0.98	3.46	0.35	------	------	----	----	----
1891	26.0	+ 8.1	58	— 4	1.75	+0.70	3.99	0.61	------	4	13	7	11
1892	15.3	— 2.6	76	—38	1.09	+0.04	3.13	0.10	6.9	5	16	9	6
1893	9.3	— 8.6	54	—34	0.74	—0.31	3.20	0.13	6.9	6	11	9	11
1894	19.3	+ 1.4	69	—37	1.09	+0.04	2.24	0.31	6.0	5	14	9	8
1895	13.6	— 4.3	68	—31	0.85	—0.20	2.65	0.09	8.7	4	15	7	9
1896	23.4	+ 5.5	68	—20	0.48	—0.57	2.10	T.	2.8	3	10	10	11
1897	17.2	— 0.7	66	—30	2.01	+0.96	6.16	0.15	8.2	7	12	7	12
1898	23.4	+ 5.5	52	—11	1.60	+0.55	5.32	T.	12.6	5	15	6	10
1899	19.8	+ 1.9	68	—34	0.28	—0.77	1.15	T.	1.5	3	15	10	6
1900	25.6	+ 7.7	68	—20	0.53	—0.52	2.47	T.	2.3	3	16	7	8
1901	23.7	+ 5.8	60	—21	0.74	—0.31	2.34	0.04	6.2	4	14	9	8
1902	22.4	+ 4.5	63	—31	0.88	—0.17	2.83	0.19	9.4	4	17	8	6
1903	23.0	+ 5.1	60	—12	0.28	—0.77	1.46	T.	2.0	4	13	7	11
1904	14.0	— 3.9	57	—32	1.18	+0.13	3.68	0.02	6.1	6	12	8	11
1905	11.2	— 6.7	56	—30	0.91	—0.14	1.82	0.12	11.1	7	14	7	10
1906	24.6	+ 6.7	69	—19	1.52	+0.47	4.71	0.28	11.3	5	14	6	11
1907	18.8	+ 0.9	68	—22	1.52	+0.47	5.30	0.10	6.0	7	8	7	16
1908	24.9	+ 7.0	60	—18	0.44	—0.61	1.50	0.06	4.6	2	17	8	6
1909	21.2	+ 3.3	72	—25	1.66	+0.61	3.74	0.41	7.8	6	9	6	16
1910	18.1	+ 0.2	56	—35	1.57	+0.52	3.15	0.55	12.6	6	13	7	11
1911	20.2	+ 2.3	66	—35	0.97	—0.08	3.73	0.11	7.3	5	9	8	14
1912	4.2	—13.7	49	—47	0.53	—0.52	1.90	T.	5.5	5	14	7	10
1913	20.9	+ 3.0	62	—25	0.77	—0.28	2.05	0.04	7.2	5	14	9	8
1914	27.8	+ 9.9	64	—10	0.88	—0.17	2.34	0.27	5.1	5	11	8	12
1915	17.5	— 0.4	59	—32	1.63	+0.58	3.15	0.10	7.3	8	13	8	10
1916	17.8	— 0.1	63	—34	2.62	+1.57	6.07	0.85	7.2	10	12	6	13
1917	17.0	— 0.9	60	—28	0.83	—0.22	2.07	0.17	7.2	4	17	8	6
1919	26.8	+ 8.9	64	—32	0.24	—0.81	0.86	T.	2.8	2	20	5	6

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

FEBRUARY.

Mild weather prevailed, except cold periods, 4th-9th and 24th-28th. No severely cold weather occurred; below zero temperatures were infrequent and were not reported at all in the southeastern counties. Temperature excesses of 5 to 8 degrees occurred in the southern tiers of counties but in the northern tier the temperature was nearly normal.

Precipitation was in excess of the normal, except the extreme southeast corner of the State, and was generally well distributed as to frequency and area. A heavy rain, generally exceeding one inch, occurred on the 13th-14th, turning to snow. Snowfall ranged from approximately 5 inches in Harrison, Greene, Boone, Clinton and Keokuk counties, to 18 inches in Osceola County. The ground was snow-covered less than five days in some of the extreme southern and eastern counties and about 25 days in Emmet and Dickinson Counties in the northwest. During a general storm that was moving eastward over this part of the country, on the 13th-14th, a copious deposit of dust or sediment occurred, which from its peculiar reddish color and crystalline structure, as revealed by microscopic examination, is believed to have been transported from the far west.

The mild, moist winter is believed to have brought winter wheat, rye and grasses through in good condition. Fruit buds, though abnormally swelled, are believed safe, except possibly peaches in the south. In the southern and eastern counties, the ice harvest was the smallest in years and a large quantity has been shipped in from the north. The roads were generally bad.

Pressure. The mean pressure (reduced to sea level) for the State was 30.00 inches. The highest recorded was 30.61 inches, at Dubuque, on the 19th, and the lowest was 28.96, at Omaha, Neb., on the 13th. The monthly range was 1.65 inches.

Temperature. The mean temperature for the State, as shown by the records of 97 stations, was 24.9°, or 4.4° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 20.7°, or 3.6° higher than the normal; Central, 25.3°, or 4.6° higher than the normal; Southern, 28.8°, or 5.2° higher than the normal. The highest monthly mean was 31.4°, at Keokuk and Burlington, and the lowest monthly mean was 16.2°, at Sibley. The highest temperature reported was 65°, at Fairfield and Ottumwa, on the 11th, and the lowest reported was —16°, at Spencer, on the 9th. The temperature range for the State was 81°.

Humidity. The average relative humidity for the State at 7:00 a. m. was 86 per cent, and at 7.00 p. m. it was 76 per cent. The mean for the month was 81 per cent, or about 1 per cent higher than the normal. The highest monthly mean was 87 per cent, at Charles City, and the lowest was 77, at Omaha, Neb.

Precipitation. The average precipitation for the State, as shown by the records of 102 stations, was 2.42 inches, or 1.27 inches more than the normal. By divisions, the averages were as follows: Northern, 2.37 inches, or 1.46 inches more than the normal; Central, 2.50 inches, or 1.30 inches more than the normal; Southern, 2.40 inches, or 1.05 inches more than the normal. The greatest amount, 4.12 inches, occurred at Nora Springs, and the least, 1.09 inches, at Lansing. The greatest amount in any 24 consecutive hours, 2.10 inches, occurred at Glenwood on the 13th.

Snow. The average snowfall for the State was 9.9 inches, or 2.5 inches more than the normal. The greatest amount, 18.0 inches, occurred at Sibley, and the least, 3.8 inches, at Logan.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau station was 43 miles an hour from the west at Keokuk on the 28th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 51, or about 5 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 46; Davenport, 46; Des Moines, 46; Dubuque, 52; Keokuk, 58; Sioux City, 57; Omaha, Neb., 49.

Miscellaneous Phenomena. Aurora, observed at Atlantic on the 6th; Nora Springs on the 21st; and Alta, Oskaloosa and Pella on the 28th. Dust, (red) 13th, 14th. Fog, 5th, 12th. Hail, 2d, 3d, 12th, 13th. Halo, (lunar or solar) 6th, 12th, 16th, 19th, 25th, 27th. Sleet, 2d, 3d, 12th, 13th, 18th, 20th, 28th. Thunderstorm, 3d, 13th.

COMPARATIVE DATA FOR THE STATE—FEBRUARY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 or more	Clear	Partly cloudy	Cloudy
1890	26.0	+ 5.5	67	—24	0.83	—0.32	2.18	0.11	------	------	----	----	----
1891	19.4	— 1.1	70	—31	1.16	+0.01	2.41	0.55	------	3	13	7	8
1892	28.1	+ 7.6	68	—20	1.20	+0.05	2.18	0.12	5.0	6	6	7	16
1893	16.4	— 4.1	60	—28	1.39	+0.24	2.91	0.06	8.1	6	10	8	10
1894	19.7	— 0.8	60	—19	0.89	—0.26	2.41	T.	8.4	3	16	8	4
1895	16.4	— 4.1	73	—33	0.49	—0.66	1.34	0.02	3.3	4	13	9	6
1896	27.4	+ 6.9	78	—13	0.71	—0.44	2.40	0.04	5.4	4	12	9	8
1897	24.7	+ 4.2	61	—24	0.89	—0.26	1.81	0.22	8.0	5	6	10	12
1898	24.2	+ 3.7	62	—18	1.20	+0.05	3.65	0.10	7.8	5	10	9	9
1899	12.2	— 8.3	75	—40	0.89	—0.26	4.32	0.12	7.1	5	11	10	7
1900	14.8	— 5.7	60	—27	1.30	+0.15	4.57	0.18	9.9	6	10	8	10
1901	17.5	— 3.0	49	—21	1.01	—0.14	3.00	0.12	9.7	4	15	7	6
1902	17.6	— 2.9	62	—21	0.73	—0.42	2.39	0.02	2.6	4	13	8	7
1903	19.8	— 0.7	56	—21	1.18	+0.03	3.25	0.30	7.9	4	13	7	8
1904	14.8	— 5.7	70	—26	0.41	—0.74	1.99	T.	4.5	4	10	9	10
1905	12.8	— 7.7	69	—41	1.57	+0.42	2.97	0.44	15.5	7	14	6	8
1906	23.6	+ 3.1	66	—32	1.29	+0.14	2.91	0.20	6.1	5	14	7	7
1907	25.0	+ 4.5	65	—31	0.71	—0.44	1.95	0.06	4.6	4	14	6	8
1908	24.3	+ 3.8	59	—16	1.69	+0.54	3.95	0.23	8.9	6	12	6	11
1909	26.2	+ 5.7	62	—26	1.54	+0.39	4.72	0.30	7.7	5	11	6	11
1910	17.8	— 2.7	58	—21	0.46	—0.69	2.09	T.	4.0	3	14	8	6
1911	27.3	+ 6.8	71	—13	2.76	+1.61	5.46	0.50	7.0	6	12	6	10
1912	18.1	— 2.4	57	—30	1.21	+0.06	3.25	0.04	11.2	5	10	9	10
1913	20.2	— 0.3	70	—24	0.82	—0.33	2.39	0.07	7.3	4	14	7	7
1914	16.8	— 3.7	59	—29	0.87	—0.28	1.99	0.32	9.2	6	10	9	9
1915	29.1	+ 8.6	62	— 8	2.93	+1.78	5.39	0.43	9.4	9	9	5	14
1916	19.0	— 1.5	62	—32	0.55	—0.60	1.38	0.05	6.0	4	14	8	7
1917	15.2	— 5.3	68	—37	0.36	—0.79	1.19	T.	3.5	3	14	8	6
1918	23.0	+ 2.5	70	—36	0.95	—0.20	2.10	0.09	6.0	5	14	7	7
1919	24.9	+ 4.4	65	—16	2.42	+1.27	4.12	1.09	9.9	8	11	5	12

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

THE WINTER OF 1918-1919.

The mean temperature for the three winter months was 28.1°, which is 7.3° above the normal for the State, and 2.1° warmer than the warmest of the 29 winters of record, 1907-8. The highest temperature reported was 68° at Columbus Junction, Louisa County, on December 8. The lowest temperature reported was 32° below zero at Maquoketa, Jackson County. on January 4.

The average monthly precipitation for the State was 1.32 inches, and the average total precipitation was 3.95 inches, or 0.53 inch more than the winter normal. The average total snowfall, unmelted, was 17.9 inches, or 2.6 inches less than the normal and 6.0 inches less than the average fall for the winter of 1917-18.

The total number of days with .01 inch or more of precipitation was 18, or the same as the average for the winter of 1917-18. The average number of clear days was 40, partly cloudy, 18, cloudy, 32, as compared with 37 clear, 24 partly cloudy and 29 cloudy days during the winter of 1917-18.

MARCH.

March came in with a cold wave and temperatures of zero or lower at nearly all stations, but temperatures were generally above normal after the

10th, and the mean temperature was above normal at all stations, the greatest excess being about 6° from southern Harrison County southeast to Page County. The mean temperature, December to March, inclusive, was 30.4°, or 6.5° higher than the normal and 1.4° warmer than the warmest similar period heretofore (1907-8) in 29 years. The ground was not frozen deeply at any time and plowing was done at intervals in each of the winter months.

Snow occurred at most stations on the 4th or 6th-7th and heavy rains 14th-16th. The total precipitation was slightly below the normal from the middle-western counties northeast to the north-central counties; also in the extreme northeast and southeast. An excess of over 2 inches occurred in Polk, Warren, and the southern portions of Marion and Mahaska Counties.

The ground was snow-covered in nearly all portions of the State during the prevalence of zero temperatures at the beginning of the month. In the Big Sioux Valley and east through the northern two tiers of counties and from Polk and Warren Counties northeast to the Mississippi River the snow covering continued from 7 to 10 days.

The soil was more than usually moist throughout the winter, but dried rapidly after March 16. Seeding was half finished at the close of the month and beginning in the central counties. Winter wheat never looked better. Rye, grasses, clover, alfalfa and fruits were in very good condition. Very little winter-killing was reported.

About 6 p. m. of the 15th a tornado occurred at Toronto, Iowa, causing damage to buildings estimated at $2,000. About 3:30 p. m. of that date a small tornado moved from southwest to northeast between Des Moines and Fort Des Moines, damaging residences, barns and out-buildings about $3,000.

Sleet globules falling at Oskaloosa on the morning of the 4th had a pinkish tint due to dust particles washed from the air by the raindrops before they became frozen. Microscopic examination of the dust indicated that it was of Rocky Mountain origin, having been transported by a large general storm that passed eastward over the state on the 3d-4th.

Pressure. The mean pressure (reduced to sea level) for the State was 30.17 inches. The highest recorded was 30.80 inches, at Charles City, on the 21st; and the lowest was 29.47 inches, at Sioux City, on the 14th. The monthly range was 1.33 inches.

Temperature. The mean temperature for the State, as shown by the records of 103 stations, was 37.5°, or 4.2° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 34.7°, or 4.3° higher than the normal; Central, 37.6°; or 4.0° higher than the normal; Southern, 40.2°, or 4.3° higher than the normal. The highest monthly mean was 43.0°, at Keokuk, and the lowest monthly mean was 30.6°, at Sibley. The highest temperature reported was 78°, at Thurman, on the 19th. The lowest temperature reported was —11°, at Inwood on the 1st.

Humidity. The average relative humidity for the State at 7 a. m. was 83 per cent, and at 7 p. m. it was 68 per cent. The mean for the month was 76 per cent, or about 2 per cent higher than the normal. The highest monthly mean was 80 per cent, at Charles City, and the lowest was 71 at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 109 stations, was 2.33 inches, or 0.56 inch more than the normal. By divisions the averages were as follows: Northern, 1.58 inches, or 0.05 inch more than the normal; Central, 2.44 inches, or 0.57 inch more than the normal; Southern, 2.98 inches, or 1.06 inches more than the normal. The greatest amount, 5.40 inches, occurred at Lacona, and the least. 0.81 inch at Spencer. The greatest amount in any 24 consecutive hours, 3.50 inches, occurred at Muscatine on the 16th.

Snow. The average snowfall for the State was 1.1 inches, or 4.2 inches less than the normal. The greatest amount, 5.5 inches occurred at Rock Rapids. Fourteen stations reported no snow, and 20 stations reported only a trace.

Wind. The prevailing direction of the wind was from the southeast. The highest velocity reported from a regular Weather Bureau station was at the rate of 45 miles an hour from the southeast, this occurring at Sioux City on the 14th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 60, or about 2 per cent higher than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 51; Davenport, 54; Des Moines, 62; Dubuque, 63; Keokuk, 67; Sioux City, 60; Omaha, Neb., 62.

Rivers. Stages above normal prevailed in most of the interior rivers of the State during the winter, which was so mild that in the central and southern portions the rivers remained open much of the time and there was no well-defined spring breakup. Heavy rains, March 14-16, caused marked rises in all of the rivers. The smaller streams of the eastern parts of the State overflowed and caused some damage by washouts and interfering with railway traffic. Three persons were drowned near Waukon, Allamakee County, while crossing what had been a dry run before the storm. The Des Moines River at Des Moines reached a crest stage of 8.4 feet, 8.6 feet below flood stage, on the 19th, but about 50 miles down stream where the drainage area received heavier rains the flood stage was reached. At Ottumwa it rose 8.8 feet to a crest stage of 13.2 feet, 3.2 feet above flood stage, on the 18th. Moderate crests passed down the boundary rivers between the 19th and 24th.

Miscellaneous Phenomena. Aurora, 1st, 5th, 8th, 12th, 19th, 20th, 21st, 27th, 28th, 31st. Birds: (migration of) Corydon, robins and bluebirds on the 10th; Earlham, bluebirds on the 9th, robins and meadow larks on the 13th, wild geese and ducks on the 13th; Murray, robins and bluebirds on the 8th; Boone, robins on the 11th, bluebirds on the 12th; Whitten, robins on the 10th; Nora Springs, robins and meadow larks on the 23d; Pocahontas, robins, meadow larks and wild ducks on the 13th and 14th; Postville, bluebirds on the 12th, robins on the 15th, blackbirds, on the 16th; Sanborn,

robins on the 15th. Corona, 9th, 12th. Dust, (red) 4th. Fog, 8th, 9th, 13th, 14th, 15th, 20th, 25th, 30th. Hail, 4th, 9th, 14th, 15th. Halo, (lunar or solar) 6th. Parhelia, 6th, 17th. Sleet, 4th, 6th, 7th, 8th, 10th, 15th, 26th. Thunderstorms, 4th, 14th, 15th, 16th, 25th, 29th, 30th. Tornadoes, 15th.

COMPARATIVE DATA FOR THE STATE—MARCH.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	28.0	— 5.3	75	—24	1.57	—0.20	3.67	0.32	------	----	----	----	----
1891	26.8	— 6.5	66	—19	2.60	+0.83	4.58	1.33	------	10	6	8	17
1892	31.9	— 1.4	84	— 6	2.22	+0.45	4.58	0.57	3.9	6	11	8	12
1893	31.8	— 1.5	84	— 8	2.14	+0.37	4.40	0.64	4.0	8	9	11	11
1894	41.0	+ 7.7	84	— 5	2.03	+0.26	4.52	0.26	2.7	6	13	10	8
1895	34.4	+ 1.1	94	—11	0.83	—0.94	2.60	0.22	2.9	4	16	8	7
1896	30.9	— 2.4	81	—12	1.10	—0.67	3.99	0.16	5.4	5	12	9	10
1897	32.0	— 1.3	72	—22	2.39	+0.62	6.16	0.29	5.5	8	9	8	14
1898	37.5	+ 4.2	72	— 2	1.94	+0.17	6.21	0.33	3.7	6	12	9	10
1899	23.0	—10.3	75	—16	1.62	—0.15	5.90	0.37	8.0	6	7	12	12
1900	30.7	— 2.6	81	—13	2.06	+0.29	5.15	0.45	6.6	5	12	9	10
1901	34.2	+ 0.9	76	— 8	2.64	+0.87	5.25	0.70	12.6	7	10	8	13
1902	39.1	+ 5.8	79	—12	1.45	—0.32	4.33	0.13	1.3	7	9	11	11
1903	38.8	+ 5.5	82	6	1.38	—0.39	3.90	0.15	3.9	7	11	7	13
1904	34.8	+ 1.5	78	3	2.18	+0.41	4.57	0.50	4.4	7	8	8	15
1905	41.5	+ 8.2	84	1	2.04	+0.27	3.70	0.39	4.1	7	8	8	15
1906	27.1	— 6.2	65	—14	2.34	+0.57	4.55	0.58	8.9	10	8	7	16
1907	40.6	+ 7.3	92	— 7	1.35	—0.42	5.05	0.23	4.1	6	14	7	10
1908	37.9	+ 4.6	85	— 8	1.58	—0.19	3.74	0.45	1.1	6	13	7	11
1909	32.5	— 0.8	71	—15	1.53	—0.24	5.00	0.28	9.8	6	12	10	9
1910	48.9	+15.6	92	—10	0.17	—1.60	1.32	0.00	T.	1	23	6	2
1911	39.4	+ 6.1	83	2	0.93	—0.84	4.84	T.	1.9	5	16	9	6
1912	24.9	— 8.4	70	—19	2.01	+0.24	5.25	0.60	19.1	7	15	6	10
1913	31.9	— 1.4	78	—23	2.48	+0.71	5.88	0.74	5.3	9	11	10	10
1914	34.7	+ 1.4	78	— 5	1.69	—0.08	3.84	0.28	1.8	7	12	8	11
1915	29.3	— 4.0	61	— 5	0.96	—0.81	2.12	0.17	8.8	5	8	9	14
1916	35.2	+ 1.9	80	—18	1.57	—0.20	5.80	0.23	2.9	6	11	9	11
1917	34.6	+ 1.3	85	—12	1.84	+0.07	4.35	0.57	6.2	6	14	8	9
1918	42.9	+ 9.6	85	0	0.63	—1.14	2.12	0.03	2.6	3	19	7	5
1919	37,5	+ 4.2	78	—11	2.33	+0.56	5.40	0.81	1.1	6	15	8	[illegible]

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

APRIL.

For the State as a whole, April temperature was nearly normal, though deficiencies approximating 2° occurred from Union County northeast through Dallas to southern Hardin County and from Webster northeast to Worth, while excesses in the eastern portion were greatest (about 2 degrees) in Linn County. Temperatures, 5th-7th, the warmest period, were 10 to 18 degrees above normal, while during a cold period, 24th-26th, they were about as much below normal with readings low in the twenties and heavy to killing frosts in nearly all sections. Fortunately, nothing was far enough advanced to be seriously damaged except fruit in Scott and possibly some nearby counties.

Showers were frequent and heavy. The average number of rainy days, 14, exceeds the previous April record which was 12 in 1909; while the amount of precipitation has been exceeded only in 1896 and 1897. Rain fell some place in the State every day except the 25th. Downpours on the 23d damaged roads and railways and eroded and flooded fields in portions of Shelby, Audubon, Guthrie, Carroll and Greene Counties. Heavy rains occurred in many sections on the 7th and 9th. Precipitation was above normal in all but Lee and Des Moines Counties, the greatest excesses, 5 to nearly 7 inches, being in Adair and Cass counties.

A small tornado struck about two miles south of Grandmound, Clinton County, on the afternoon of the 23d, but damage was confined to trees and small buildings. The Omaha tornado of the 6th seems to have done no material damage after crossing the Missouri river.

Field work was greatly delayed by the frequent rains and wet soil, not more than 5 or 6 days being suitable. Not more than 60 per cent of the intended oats acreage had been seeded up to the close of the month and much that was seeded before the heavy rains set in on the 7th lay uncovered on the ground and thus germinated without the possibility of disking or harrowing. Considerable of the pledged and intended spring wheat acreage could not be seeded and will be devoted to other crops, mostly corn. Winter wheat stooled freely, made rank growth and was a foot high and beginning to joint in the southern counties. It was feared that the rank growth would cause it to lodge and that the indicated excess of straw would reduce the yield of grain. Pasturing and clipping with mowers was resorted to in some localities. Only about 40 per cent of the spring plowing was done and practically no corn planting. Blooming of fruit trees was beneficially retarded, though in the southern tier of counties the blossoms opened and received the first spray. The wet, cloudy weather was detrimental to the pig crop. Sunshine averaged 44 per cent of the possible amount or 16 per cent below normal.

Pressure. The mean pressure, (reduced to sea level), for the State was 29.97 inches. The highest recorded was 30.66 inches, at Sioux City on the 24th, and the lowest was 29.23 inches at Omaha, Nebr., on the 6th. The monthly range was 1.43 inches.

Temperature. The mean temperature for the State, as shown by the records of 103 stations, was 48.4°, or 0.3° lower than normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 46.5°, or 0.2° lower than the normal; Central, 48.7° or 0.2° lower than the normal; Southern, 50.0°, or 0.6° lower than the normal. The highest monthly mean was 52.9° at Keokuk, and the lowest was 43.8°, at Northwood. The highest temperature reported was 81°, at Fairfield on the 6th, and the lowest was 20° at Fayette, Maquoketa and Earlham, on the 1st. The temperature range for the State was 61°.

Humidity. The average relative humidity for the State at 7 a. m. was 81 per cent; and at 7 p. m. it was 66 per cent. The mean for the month was 74 per cent, or about 7 per cent above the normal. The highest monthly mean was 78 per cent at Omaha, Nebr., and the lowest was 68 per cent, at Dubuque.

Precipitation. The average precipitation for the State, as shown by the records of 109 stations, was 4.78 inches, or 1.92 inches more than the normal. By divisions the averages were as follows: Northern, 4.32 inches, or 1.64 inches more than the normal; Central, 4.81 inches, or 1.95 inches more than the normal; Southern, 5.22 inches, or 2.17 inches more than the normal. The greatest amount, 9.00 inches, occurred at Cumberland, and the least, 1.94 inches, at Keokuk. The greatest amount in any 24 consecutive hours, 3.05 inches, occurred at Greenfield, on the 21st-22d.

Snow. The average snowfall for the State was 0.7 inch, or 1.1 inches less than the normal. The averages by divisions were: Northern, 1.6 inches; Central, 0.5 inch; Southern, a trace. The greatest amount, 9.0 inches, occurred at Sioux Center.

Wind. The prevailing direction of the wind was from the southeast. The highest velocity reported from a regular Weather Bureau station was at the rate of 45 miles an hour from the northwest at Sioux City on the 5th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 44, or about 16 per cent below normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 39; Davenport, 44; Des Moines, 48; Dubuque, 46; Keokuk, 52; Sioux City, 35; Omaha, Neb., 41. Clear days averaged, 8; partly cloudy, 8; cloudy, 14.

Miscellaneous Phenomena. Aurora, 15th, 18th, 22d. Birds, (Migration of): Earlham, mocking birds, 21st, whippoorwills, 22d, wrens, 28th. Corona, 5th. Fog, 2d, 3d, 4th, 5th, 29th, 30th. Halo, (lunar or solar): 2d, 4th, 5th, 6th, 7th, 9th, 10th, 12th, 16th, 18th, 21st, 22d, 23d. Hail, 2d, 5th, 6th, 7th, 9th, 10th, 12th, 16th, 21st, 22d, 23d. Sleet: 8th, 9th, 10th, 15th, 16th, Thunderstorms, 1st, 2d, 3d, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 13th, 14th, 15th, 16th, 21st, 22d, 23d, 24th, 28th, 29th. Tornado, 6th, 23d.

Rivers. River stages were generally above normal throughout the month. The Missouri touching Iowa did not closely approach flood stage. The Mississippi did not reach flood stage above Le Claire, though in Dubuque cellars of some wholesale houses were flooded when a stage of 16.6 feet was reached on the 22d-23d. Damage was averted by preventive measures taken on warnings given 10 days in advance by the Dubuque Weather Bureau Office. The highest stage at Clinton, 15.4 feet on the 24th was 0.6 foot below flood stage. At Muscatine the highest stage, 15.8 feet on the 26th, was 0.2 foot below flood stage. At Le Claire the highest stage, 10.7 feet, 0.7 foot above flood stage, was reached on the 29th, and a dam that is being constructed to improve navigation was damaged. Keokuk passed the flood stage, 14 feet, on the 21st and reached a stage of 16.2 on the 27th-28th. There was considerable overflow of both the Des Moines and Mississippi rivers in that vicinity.

Interior rivers, though high, were generally below flood stage except the Des Moines River from Ottumwa to the mouth. Flood stages (10 feet or higher) prevailed at Ottumwa, 24th-27th, with a crest stage of 12.0 feet on the 26th.

Wettest Period. More precipitation fell and more days were rainy in the period February 1-April 30 in Iowa than in any other similar period in the 30 years since statewide records have been compiled; 9.53 inches falling on 28 days, or 3.75 inches and 9 days above the respective normals. The precipitation is 165 per cent of the normal. The year 1897 has held the record heretofore with 8.63 inches and 24 rainy days.

COMPARATIVE DATA FOR THE STATE—APRIL.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	51.8	+3.1	88	2	1.80	—1.06	4.46	0.38	------	6	14	9	7
1891	50.6	+1.9	93	13	2.15	—0.71	5.06	0.59	------	8	14	7	9
1892	45.4	—3.3	88	14	4.75	+1.89	8.38	2.43	5.7	9	8	9	13
1893	45.5	—3.2	96	15	4.21	+1.35	8.51	1.24	6.0	10	8	9	13
1894	51.7	+3.0	93	12	3.07	+0.21	6.91	0.55	0.2	9	11	11	8
1895	54.2	+5.5	98	8	2.62	—0.24	5.88	0.28	2.1	5	14	8	8
1896	54.5	+5.8	94	10	5.02	+2.16	9.67	2.35	4.5	11	11	10	9
1897	47.9	—0.8	89	19	5.35	+2.49	9.86	2.22	T.	11	9	9	12
1898	48.1	—0.6	91	14	2.56	—0.30	4.82	0.27	T.	8	13	9	8
1899	48.9	+0.2	89	1	2.40	—0.46	5.76	0.56	2.0	7	12	11	7
1900	52.2	+3.5	89	19	2.67	—0.19	6.62	0.43	0.9	6	12	9	9
1901	49.9	+1.2	92	15	1.79	—1.07	3.47	0.66	2.0	5	14	8	8
1902	48.2	—0.5	96	9	1.71	—1.15	4.15	0.40	T.	5	14	11	5
1903	49.8	+1.1	86	17	2.98	+0.12	6.00	0.74	0.8	9	11	9	10
1904	44.1	—4.6	86	13	3.63	+0.77	8.97	1.52	1.4	7	15	6	9
1905	47.5	—1.2	90	10	3.03	+0.17	5.49	0.63	1.2	8	12	8	10
1906	52.5	+3.8	94	22	2.42	—0.44	5.55	0.53	0.6	8	14	9	7
1907	41.5	—7.2	80	10	1.32	—1.54	3.22	0.24	2.7	6	12	8	10
1908	50.5	+1.8	91	8	2.24	—0.62	4.59	0.67	0.3	8	14	8	8
1909	43.8	—4.9	86	14	4.58	+1.72	9.43	0.83	3.1	12	9	9	12
1910	52.5	+3.8	99	15	1.48	—1.38	4.86	0.10	3.0	7	14	7	9
1911	46.7	—2.0	86	3	3.09	+0.23	6.04	1.33	3.6	9	11	8	11
1912	49.9	+1.2	84	20	2.66	—0.20	5.66	0.78	1.1	8	13	8	9
1913	50.2	+1.5	88	16	3.28	+0.42	7.43	1.12	2.7	9	15	5	10
1914	48.6	—0.1	88	11	2.52	—0.34	5.03	0.37	0.3	8	10	8	12
1915	57.2	+8.5	95	18	1.41	—1.45	4.02	0.05	T.	7	15	10	5
1916	47.1	—1.6	90	11	2.62	—0.24	5.92	1.13	1.1	10	10	9	11
1917	45.5	—3.2	88	17	4.55	+1.69	7.84	2.05	3.8	11	9	7	14
1918	44.8	—3.9	79	12	2.32	—0.54	4.20	1.01	3.5	9	12	8	10
1919	48.4	—0.3	81	20	4.78	+1.92	9.00	1.94	0.7	14	8	8	14

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

MAY.

Cool weather prevailed till the 26th when it turned warm. Temperatures in the 90's occurred at many stations on the 30th. Mean temperatures were below the normal at all stations but Clarinda which had a slight excess. Frosts or freezes were general on the 2d and occasional light frosts were reported up to the 18th.

The precipitation was below normal, except from Appanoose east to Lee and northeast to Jones and Jackson counties. The rainy period that prevailed through April continued till May 6 when it culminated in a general downpour. The saturated condition of the soil prevented, or greatly retarded, spring plowing and corn planting during the comparatively rainless week that followed, so that by the 15th only 40 per cent of the corn had been planted. Heavy rains on the 19th in the southern division caused further delay. By the close of the month, 95 per cent of the corn planting had been completed—about the same as last year—the stand was good, about 80 per cent of the crop showed the rows across the field, and cultivation was making good progress in the drier counties. The cold, cloudy, rainy weather of the first week prevented proper pollination of cherries and plums thereby greatly reducing the crop. Pastures, clover, timothy and alfalfa are in the best condition for several years, except where injured beyond recovery by drouth and grasshoppers in the southwest portion last season. Winter wheat made rapid growth and became so rank generally as to be subject to damage by lodging.

Tornadoes occurred on the 3d, 6th and 31st. See page 20.

Pressure. The mean pressure (reduced to sea level) for the State was 29.95 inches. The highest recorded was 30.35 inches, at Dubuque, on the 5th, and the lowest was 29.53, at Sioux City, on the 31st. The monthly range was 0.82 inch.

Temperature. The mean temperature for the State, as shown by the records of 104 stations, was 58.2°, or 2.3° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 57.2°, or 1.8° lower than the normal; Central, 58.2°, or 2.5° lower than the normal; Southern, 59.1°, or 2.6° lower than the normal. The highest monthly mean was 61.6°, at Omaha, Nebr., and the lowest was 55.1°, at Postville. The highest temperature recorded was 93° at Cedar Rapids, on the 30th, and the lowest was 30°, at Decorah, Elkader, Fayette and Mason City, on the 2d. The temperature range for the state was 63°.

Humidity. The average relative humidity for the State at 7 a. m., was 79 per cent, and at 7 p. m. it was 58 per cent. The mean for the month, 68 per cent, is about normal. The highest monthly mean was 72 per cent, at Keokuk, and the lowest was 62 per cent, at Des Moines.

Precipitation. The average precipitation for the State, as shown by the records of 110 stations, was 3.11 inches, or 1.46 inches less than the normal. By divisions the averages were as follows: Northern, 2.49 inches, or 1.99 inches less than the normal; Central, 2.97 inches, or 1.62 inches less than the normal; Southern, 3.87 inches, or 0.77 inch less than the normal. The greatest amount, 7.14 inches, occurred at Maquoketa, and the least 0.73 inch, at Fort Dodge. The greatest amount in 24 consecutive hours, 3.00 inches, occurred at Olin on the 3d.

Snowfall. The only snow reported was traces, at Dubuque and Perry.

Wind. The prevailing direction of the wind was from the southeast. The average velocity was 7.5 miles per hour, or 1.2 miles less than the normal. The highest velocity reported from a regular Weather Bureau station was at the rate of 40 miles an hour from the northwest at Sioux City, on the 6th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 59 or about 3 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 59; Davenport, 51; Des Moines, 61; Dubuque, 62; Keokuk, 63; Sioux City, 52; Omaha, Nebr.. 65.

Miscellaneous Phenomena. Aurora, 1st, 2d, 3d, 4th, 5th, 12th, 16th, 24th. Fog, 3d, 14th, 15th, 24th, 25th. Frost, 1st, 2d, 5th, 6th, 9th, 10th, 11th, 16th, 17th, 18th. Hail, 3d, 4th, 5th, 15th, 19th. Halo, (lunar or solar), 1st, 2d, 4th, 7th, 10th, 11th, 12th, 13th, 17th, 18th, 23d, 25th, 27th. Thunderstorm, 2d, 3d, 4th, 5th, 6th, 7th, 14th, 15th, 18th, 19th, 26th, 30th, 31st. Rainbow, 17th, 19th.

Rivers. Flood stages prevailed on the Mississippi River below Le Claire during the first part of the month with a crest stage of 17.4 feet at Keokuk on the 8th; then falling to below the flood stage after the 12th. On the Missouri, moderate stages prevailed with but slight fluctuations. Moderately high stages prevailed on the interior rivers during the first part of the month due to heavy rains, but the flood stage was not reached except on the Des Moines River below Ottumwa.

Tornadoes. On May 3, between 4.30 p. m. and 5.20 p. m., a well defined tornado formed about 5 miles southwest of Linn Grove, Buena Vista county, moved northeastward, passing a short distance northeast of Sioux Rapids and turned slightly toward the north into Clay county where it dissipated. Numerous sets of farm buildings in its course were demolished and the steel rails and wooden cross ties of the recently constructed bridge of the Minneapolis and St. Louis Railroad across the Little Sioux River near Sioux Rapids, were torn from the 90-foot wooden trestle, leaving it otherwise almost undamaged. The path of the storm at the widest was 400 feet and its total length about 12 miles. The total damage is about $25,000. Between 6:00 p. m. and 6:30 p. m. of the same day, about 20 miles to the east in Pocahontas county, another tornado moved across the northwest corner of Marshall township into the south-central portion of Swan Lake township south of the town of Laurens. The path was 75 to 200 feet wide and 4½ miles long. Practically nothing was left standing in its path; total damage $15,000. On the same day between 6:45 p. m. and 7 p. m. another tornado moved east-northeast from just south of Ulmer, Sac county, through the village of Grant City, where it destroyed six houses, a church and a school house, damaged four other houses, and uprooted large trees. It disappeared about three miles northeast of Grant City. The width of the path was about 200 feet and the length about six miles; total damage about $10,000. On May 6 a short tornado occurred south of Harvey, Marion county, and another near Langworthy, Jones county, but the damage was immaterial. On the 31st there was slight evidence of a tornado at Walcott, Scott county.

COMPARATIVE DATA FOR THE STATE—MAY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	57.7	—2.8	90	26	3.56	—1.01	6.44	1.61	------	9	10	13	8
1891	58.3	—2.2	94	21	3.18	—1.39	7.10	1.46	------	8	14	9	8
1892	54.0	—6.5	88	29	8.77	+4.20	12.64	4.87	T.	16	5	9	17
1893	56.6	—3.9	96	26	3.45	—1.12	5.82	1.65	0	9	13	9	9
1894	61.1	+0.6	96	22	1.87	—2.70	4.77	0.33	0	6	17	10	4
1895	61.7	+1.2	104	24	3.19	—1.38	5.79	0.84	0	9	11	12	8
1896	65.5	+5.0	100	34	6.69	+2.12	11.79	3.40	0	12	11	12	8
1897	58.5	—2.0	96	20	1.92	—2.65	3.59	0.21	0	5	16	10	5
1898	59.6	—0.9	92	26	4.67	+0.10	7.82	2.22	0	12	9	10	12
1899	60.2	—0.3	90	27	6.23	+1.66	11.47	3.09	0	13	9	12	10
1900	63.2	+2.7	98	22	3.31	—1.26	6.98	0.96	0	8	14	10	7
1901	60.7	+0.2	95	28	2.35	—2.22	4.57	0.72	0	7	16	9	6
1902	63.8	+3.3	97	25	5.39	+0.82	18.04	0.87	0	13	10	12	9
1903	61.6	+1.1	91	24	8.55	+3.98	15.45	2.88	0	16	9	12	10
1904	59.6	—0.9	93	27	3.78	—0.79	8.15	1.50	0	8	13	10	8
1905	58.3	—2.2	88	28	5.95	+1.38	10.83	2.57	0	14	12	11	8
1906	60.8	+0.3	95	24	3.54	—1.03	10.72	0.89	0	11	13	10	8
1907	53.5	—7.0	96	14	3.48	—1.09	7.68	0.71	1.0	10	11	10	10
1908	59.4	—1.1	93	13	8.34	+3.77	14.33	1.33	0	15	9	11	11
1909	57.9	—2.6	97	18	4.34	—0.23	7.85	1.86	0.1	9	12	12	7
1910	55.4	—5.1	89	18	3.41	—1.16	6.91	1.29	T.	10	15	7	9
1911	64.9	+4.4	98	23	3.76	—0.81	8.73	0.42	0.7	9	16	9	6
1912	62.7	+2.2	97	29	3.33	—1.24	6.41	0.72	0	10	14	11	6
1913	59.4	—1.1	102	30	6.24	+1.67	10.25	3.14	0	13	11	8	12
1914	62.2	+1.7	98	25	3.31	—1.26	6.90	0.30	T.	10	14	11	6
1915	56.1	—4.4	99	25	7.34	+2.77	13.21	3.82	T.	14	9	9	13
1916	59.9	—0.6	94	27	4.93	+0.36	10.44	2.14	T.	12	13	10	8
1917	55.1	—5.4	95	18	3.87	—0.70	7.33	1.69	0.6	10	15	8	8
1918	64.9	+4.4	98	9	6.87	+2.30	11.98	2.72	T.	13	13	11	7
1919	58.2	—2.3	93	30	3.11	—1.46	7.14	0.73	T.	9	13	11	7

T. indicates an amount too small to measure, or less than .005 inch rainfall, and less than .05 inch snowfall.

JUNE.

The first eight days of June were cool followed by an 18-day period of unusually warm weather with cooler toward the close. All stations had an excess of temperature, the greatest being about 4 degrees in the eastern counties.

Heavy general rains, 1st-8th, were followed by more intermittent local rains which nearly ceased after the 24th. Many heavy local rains occurred in the central and north portions on the 10th and 20th. Nearly all stations reported precipitation above normal for the month, though there were some deficiencies reported in the extreme southwest and southeast counties. In portions of Buena Vista and Tama counties the precipitation was between 7 and 8 inches above the normal. A tornado in Chickasaw county, 7:30 to 8 p. m. of the 23d, caused damage totaling about $60,000. About 6:25 p. m. on the same date near Riceville, Marshall county, a tornado caused about $5,000 damage. This storm was remarkable in that it made a complete loop and crossed its own path nearly all within sections 1, 2 and 12 of Douglas Township, as vouched for by many eye witnesses.

During a severe thunderstorm in and north of Dubuque, 8:40 to 10:30 p. m., June 23d, roads and bridges were destroyed, basements flooded and street railway traffic stopped. The damage in Dubuque county amounted to about $25,000.

Hail was less prevalent than usual in June. The most important was about 3 p. m. of the 27th, in Prussia and Summerset Townships in Adair County where $100,000 damage was reported. The June hail table will appear in a later issue.

The unusually prolonged hot spell, and the high humidity of the first part of the warm period were exceptionally favorable for diseases of small grains such as scab, red rust, smut and blight. Not much black stem rust was reported. Winter wheat which had been very promising since December deteriorated greatly and was prematurely ripened. Half or more of the kernels in the heads became shrunken or diseased. This was somewhat offset by the unusually good stand. Harvest was well advanced in the south and beginning in the central counties at the close of the month. Spring wheat was similarly affected and oats did not fill well. Corn made unusual progress and the dry weather toward the close permitted cultivation so that the fields became fairly clean.

Pressure. The mean pressure (reduced to sea level) for the State was 30.01 inches. The highest recorded was 30.30 inches at Davenport, on the 13th, and the lowest was 29.66 inches, at Charles City, on the 23d. The monthly range was 0.64 inch.

Temperature. The mean temperature for the State, as shown by the records of 99 stations, was 71.9°, or 2.8° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 70.3°, or 2.7° higher than the normal; Central, 72.1°, or 2.8° higher than the normal; Southern, 73.2°, or 2.9° higher than the normal. The highest monthly mean was 75.8°, at Burlington and Keokuk, and the lowest was 68.4° at Britt. The highest temperature reported was 98° at Omaha, Nebraska, on the 23d, and the lowest was 41°, at Chariton, on the 4th. The temperature range for the State was 57°.

Humidity. The average relative humidity for the State at 7 a. m. was 85 per cent, and at 7 p. m. it was 68 per cent. The mean for the month was 76 per cent, or 6 per cent above the normal. The highest monthly mean was 82 per cent at Charles City, and the lowest was 72 per cent, at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 105 stations, was 6.13 inches, or 1.75 inches more than the normal. By divisions the averages were as follows. Northern, 7.18 inches, or 2.75 inches more than the normal; Central, 5.92 inches or 1.60 inches more than the normal; Southern, 5.29 inches, or 0.90 of an inch more than the normal. The greatest amount, 12.25 inches, occurred at Alta, and the least, 1.82 inches, at Keosauqua. The greatest amount in 24 consecutive hours, 5.10 inches, occurred at Sac City, on the 10th.

Wind. The prevailing direction of the wind was from the southeast. The highest velocity reported from a regular Weather Bureau station was 42 miles an hour, from the northwest, at Omaha, Nebraska, on the 25th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 60, or about 9 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 53; Davenport, 64; Des Moines, 54; Dubuque, 65; Keokuk, 79; Sioux City, 38; Omaha, Nebr., 65.

Miscellaneous Phenomena. Aurora, 1st, 4th, 25th. Fog, 7th, 8th, 10th, 16th, 18th, 22d, 23d, 30th. Hail, 3d, 6th, 9th, 10th, 13th, 19th, 21st, 23d, 26th. Halos (lunar or solar), 8th. Rainbows, 1st, 5th, 6th, 9th, 10th, 11th, 12th, 13th, 16th. Thunderstorms, all days during the month except on the 25th, 26th, 28th, 29th. Tornadoes, 23d, at 8:00 p. m., New Hampton; and at 6:25 p. m., Riceville.

Rivers. Flood stages were not reached on any of the boundary rivers during the month and the stages were generally below normal. On the interior river high stages prevailed during the greater portion of the first half of the month due to general excessive rains; the Des Moines River was above flood stage at Ottumwa from the 4th to the 8th, inclusive, and was within 2.1 feet of the flood stage at Boone.

COMPARATIVE DATA FOR THE STATE—JUNE.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With .01 in. or more	Clear	Partly cloudy	Cloudy
1890	72.7	+ 3.6	106	44	7.76	+3.38	16.53	1.57	------	11	12	10	8
1891	69.1	0.0	99	37	5.39	+1.01	19.88	1.68	------	11	8	10	12
1892	69.2	+ 0.1	102	42	5.19	+0.81	14.16	0.67	------	10	12	11	7
1893	71.2	+ 2.1	100	40	3.91	—0.47	7.56	1.36	------	8	15	11	4
1894	73.2	+ 4.1	104	34	2.67	—1.71	6.20	0.57	------	7	16	10	4
1895	69.7	+ 0.6	102	34	4.32	—0.06	9.26	0.98	------	10	11	11	8
1896	69.1	0.0	100	40	3.11	—1.27	7.89	0.81	------	9	12	13	5
1897	69.1	0.0	103	[illegible]	3.81	—0.57	9.38	1.03	------	10	10	12	8
1898	71.4	+ 2.3	99	42	4.72	+0.34	12.48	1.90	------	9	13	10	7
1899	70.7	+ 1.6	100	42	5.04	+0.66	11.99	1.10	------	10	12	13	5
1900	69.7	+ 0.6	102	38	3.98	—0.40	12.35	0.67	------	5	17	10	3
1901	72.3	+ 3.2	106	30	3.71	—0.67	7.84	1.05	------	9	15	11	4
1902	65.2	— 3.9	97	32	7.16	+2.78	16.04	1.46	------	14	8	11	11
1903	64.6	— 4.5	96	30	2.86	—1.52	6.04	0.75	------	10	13	10	7
1904	67.1	— 2.0	94	35	3.45	—0.93	8.35	0.44	------	7	13	10	7
1905	69.9	+ 0.8	100	36	5.53	+1.15	14.89	1.80	------	10	12	11	7
1906	67.9	— 1.2	99	37	3.92	—0.46	8.27	1.48	------	8	15	10	5
1907	66.5	— 2.6	98	36	5.35	+0.97	9.33	2.07	------	11	14	9	7
1908	67.1	— 2.0	94	35	5.66	+1.28	11.88	1.77	------	13	12	10	8
1909	69.1	0.0	96	40	6.41	+2.03	13.30	2.80	------	13	12	10	8
1910	69.5	+ 0.4	105	33	1.99	—2.39	5.51	0.05	------	7	18	7	5
1911	75.7	+ 6.6	108	36	1.82	—2.56	6.28	0.06	------	5	20	8	2
1912	66.2	— 2.9	101	34	2.74	—1.64	5.71	0.78	------	7	15	9	6
1913	71.5	+ 2.4	102	33	3.31	—1.07	8.95	0.74	------	7	19	8	3
1914	72.2	+ 3.1	101	40	5.57	+1.19	13.24	1.17	------	13	12	14	4
1915	65.1	— 4.0	91	31	4.16	—0.22	9.99	1.72	------	11	12	12	6
1916	64.5	— 4.6	96	38	3.71	—0.67	7.96	1.41	------	10	13	11	6
1917	66.0	— 3.1	100	32	6.65	+2.27	13.82	3.04	------	12	13	10	7
1918	70.8	+ 1.7	104	38	5.29	+0.91	10.19	1.55	------	11	16	10	4
1919	71.9	+ 2.8	98	41	6.13	+1.75	12.25	1.82	------	13	12	12	6

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

JULY.

July was warmer than the normal and the excess was uniform throughout the State, ranging from 3.5° in the southern division to 3.1° in the northern division. There were no cool periods and the temperature was normal, or below, on very few days. The hottest part of the month occurred during the last week and values of 100°, or slightly above, were recorded at places in all divisions.

The precipitation was deficient and unevenly distributed, ranging from less than half an inch in Butler County to nearly 8.00 inches at Dubuque. Most of the precipitation occurred during the first half of the month and was generally ample for all needs; after the 15th of the month a dry period set in that prevailed till the 31st. The dry weather in connection with the high temperature and strong winds that prevailed during the last week of the month had a very injurious effect on all vegetation and when relieved by showers on the 31st corn was beginning to fire over much of the State, particularly in the central and some southwest counties. There were no severe wind storms during the month but one of the most severe rainstorms of record occurred at Dubuque, on the 9th, 1.20 inches falling in 10 minutes and 2.70 inches fell in one hour. Seven persons lost their lives by being drowned and a number severely injured. The property loss was approximated at $125,000.00. See page 26.

Pressure. The mean pressure (reduced to sea level) for the State was 29.98 inches. The highest pressure recorded was 30.24 inches at Dubuque on the 8th, and the lowest was 29.61 at Sioux City on the 26th. The monthly range was 0.62 inch.

Temperature. The mean temperature for the State, as shown by the records of 99 stations, was 77.4°, or 3.3° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 75.8°, or 3.1° higher than the normal, Central, 77.6°, or 3.3° higher than the normal; Southern, 78.7°, or 3.5° higher than the normal. The highest monthly mean was 81.8° at Omaha, Nebraska, and the lowest was 72.4° at Postville. The highest temperature reported was 104° at Webster City on the 30th and Keosauqua on the 31st; the lowest was 41 at Waverly on the 16th. The temperature range for the State was 63°.

Humidity. The average relative humidity for the State at 7 a. m. was 75 per cent, and at 7 p. m. it was 52 per cent. The mean for the State was 64 per cent, or 4 per cent lower than the normal. The highest monthly mean was 66 per cent at Dubuque and Sioux City, and the lowest was 61 per cent at Omaha, Nebr.

Precipitation. The average precipitation for the State, as shown by the records of 105 stations, was 2.86 inches, or 1.10 inches less than the normal. By divisions the averages were as follows: Northern, 3.36 inches, or 0.52 inch less than the normal; Central, 2.42 inches, or 1.56 inches less than the normal; Southern, 2.79, or 1.23 inches less than the normal. The greatest amount, 7.82 inches, occurred at Dubuque, and the least, 0.39 of an inch at Allison. The greatest amount in 24 consecutive hours, 4.12 inches, occurred at Le Mars on the 13th.

Wind. The prevailing direction of the wind was from the southwest. The highest velocity reported from a regular Weather Bureau Station was 38 miles an hour, from the west, at Sioux City on the 13th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 82, or 8 per cent more than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City 85; Davenport 85; Des Moines 79; Dubuque 83; Keokuk 90; Sioux City 70; Omaha, Neb. 84.

Miscellaneous Phenomena. Aurora, 19th. Fog, 11th, 14th, 20th, 24th. Hail, Northern Division 9th, 11th; Central Division 8th, 9th, 12th; Southern Division, 7th, 9th, 10th, 31st. Halo (Lunar or Solar), 8th. Rainbow, 31st. Thunderstorms, 2nd, 3rd, 4th, 5th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 20th, 21st, 24th, 27th, 28th, 29th, 30th, 31st.

Rivers. Moderate stages prevailed on the Missouri River and after the first there was a gradual tendency to lower stages; on the Mississippi River good boating stages prevailed throughout the month, and except a slight freshet that occurred after the 4th at Dubuque and later at points farther down the river, the tendency was to lower stages and the lowest stages occurred generally on the last day of the month. On the interior rivers low stages prevailed.

COMPARATIVE DATA FOR THE STATE—JULY.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	75.6	+ 1.5	110	45	1.98	—1.98	5.00	0.37	------	3	18	8	5
1891	68.5	— 5.6	99	41	4.22	+0.26	8.20	1.67	------	8	13	13	5
1892	73.0	— 1.1	104	38	5.29	+1.33	12.86	1.71	------	9	16	10	5
1893	75.0	+ 0.9	102	47	3.33	—0.63	8.84	1.49	------	7	19	10	2
1894	76.4	+ 2.3	109	39	0.63	—3.33	3.50	T.	------	3	22	8	1
1895	72.1	— 2.0	104	35	3.40	—0.56	10.10	0.45	------	7	15	12	4
1896	73.6	— 0.5	104	42	6.90	+2.94	12.67	1.61	------	9	14	11	6
1897	75.6	+ 1.5	106	42	3.26	—0.70	7.60	1.01	------	6	18	10	3
1898	73.4	— 0.7	102	42	2.98	—0.98	12.88	0.55	------	7	19	9	3
1899	73.1	— 1.0	101	38	3.07	—0.89	8.66	0.42	------	7	16	10	5
1900	73.4	— 0.7	102	37	6.15	+2.19	18.45	1.80	------	9	16	10	5
1901	82.4	+ 8.3	113	46	2.34	—1.62	5.97	0.27	------	5	21	9	1
1902	73.1	— 1.0	99	41	8.67	+4.71	13.57	4.82	------	13	14	10	7
1903	72.9	— 1.2	100	40	4.83	+0.87	12.72	0.94	------	9	17	9	5
1904	70.6	— 3.5	100	38	4.41	+0.45	11.97	1.28	------	10	16	9	6
1905	70.6	— 3.5	102	40	2.91	—1.05	7.08	0.69	------	9	14	10	7
1906	70.9	— 3.2	102	42	3.04	—0.92	7.05	0.26	------	8	18	10	3
1907	73.7	— 0.4	102	41	7.27	+3.31	13.66	3.97	------	13	16	11	4
1908	73.0	— 1.1	100	42	3.66	—0.30	9.21	0.70	------	8	16	10	5
1909	72.3	— 1.8	102	46	4.77	+0.81	12.20	1.20	------	10	15	8	8
1910	74.5	+ 0.4	108	43	1.86	—2.10	5.69	0.12	------	7	19	8	4
1911	75.5	+ 1.4	111	38	2.27	—1.69	6.62	0.08	------	7	18	10	3
1912	74.6	+ 0.5	103	38	3.71	—0.25	7.56	1.17	------	10	17	10	4
1913	76.1	+ 2.0	108	45	1.82	—2.14	6.23	T.	------	5	21	8	2
1914	76.6	+ 2.5	109	43	2.27	—1.69	6.50	0.44	------	5	20	8	3
1915	69.5	— 4.6	92	40	8.32	+4.36	15.83	3.68	------	14	10	12	9
1916	79.7	+ 5.6	105	48	1.78	—2.18	6.87	0.10	------	5	23	7	1
1917	74.3	+ 0.2	106	38	2.27	—1.69	6.06	0.23	------	7	21	8	2
1918	73.1	— 1.0	105	40	3.17	—0.79	8.05	0.26	------	8	19	8	4
1919	77.4	+3.3	104	41	2.86	—1.10	7.82	0.39	------	6	22	8	1

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

INTENSE RAIN STORM AND FRESHET, DUBUQUE, IOWA, JULY, 9, 1919

J. H. Spencer.

(75th Meridian Mean Time Used Herein.)

The rain storm of July 9, 1919, was the worst at this station since July 4, 1876, when 40 persons were drowned at Rockdale, on the outskirts of Dubuque. In the storm of July 9 seven persons were drowned in freshets caused by the torrential rains and great damage resulted to streets in all portions of the city lying below the bluffs. Although three houses were struck by lightning, thunder and lightning were rather less severe than in some of the storms of the past eight years; damage from lightning was slight, probably due to the heavy rainfall, which prevented serious fires. Wind velocity was light, and therefore the crop damage was comparatively small, except on flooded lowland, where they were ruined.

At no time during the hours that preceded the period of heaviest rainfall was there much indication of a severe storm, although the weather in the morning quickly changed to warm and sultry. Rain began as a light thundershower from 11.25 a. m. to 11:55 a. m. Rain began again at 12.15 p. m. and was moderately heavy until 2:50 p. m. Then followed the great downpour of 2.64 inches from 2:51 p. m. to 3:36 p. m. Hourly amounts for the entire storm were as follows:

11 a. m. to noon	.05
Noon to 1 p. m.	.44
1 p. m. to 2 p. m.	.34
2 p. m. to 3 p. m.	.80
3 p. m. to 4 p. m.	2.23
After 4 p. m.	.01
Total	3.87 inches

Rainfall was excessive from 2.51 p. m. until 3:36 p. m., and accumulated amounts were as follows for this period:

5 minutes	.17	30 minutes	2.16
10 "	.51	35 "	2.40
15 "	1.17	40 "	2.51
20 "	1.71	45 "	2.64
25 "	1.91		

The following are the greatest amounts during the entire storm in—

5 minutes	.80	30 minutes	2.23
12 "	1.20	One hour	2.70
15 "	1.52	Two hours	3.03

Union Park, a pleasure resort on the outskirts of the city to the northwest, is a narrow valley only a few hundred feet wide in places, with steep hills on either side. Running through the valley is a creek, which is practically dry except during wet periods. During the period of excessive rainfall on July 9th this creek became a raging torrent many feet deep, overflowing its banks, and destroying park property of all kinds. A number of picnickers took shelter from the rain in a pavilion near the creek. The rising waters quickly flooded the building and finally swept it away, precipitating its occupants into the freshet. In spite of heroic deeds upon the part of the park employees and others, five persons were drowned here or elsewhere in the park. They were: Mrs. Chris Wagner, age 38; Blanche Wagner, age 10; Edmund Wagner, age 3; Sarah Sezer, age 6;

Herbert Ricke, age 4. Property loss at Union Park is estimated at from $10,000 to $15,000.

Another tragedy occurred on 32d street, near Heim's brick yard. Mrs. George Kennicker and two small children attempted to cross the street and the woman and one child were swept by the torrent of water into the Bee Branch sewer and drowned. The dead child is Ruth Brose, age 3. The other child was carried over the mouth of the sewer and escaped, but with serious injuries.

The damage to waterway streets and to many streets on the level below the bluffs was surprisingly great. Kaufman Avenue was completely ruined and also West Locust Street between Jackson School and Mt. St. Joseph College. Julian Avenue and Dodge Street were badly damaged. Much of the brick paving on 8th street for several blocks above Bluff was stripped off and thousands of brick carried down by the water to the business section of the city. The wood block paving for several blocks on Couler Avenue above 18th Street was carried away and the avenue over this area was a wreck after the storm. Some of the streets below Main, particularly from the Carr, Ryder & Adams Co. factory northward to the Brunswick-Balke-Collender Co. factory, were covered with water during the height of the storm; water in large areas was 2 to 3 feet deep. Hundreds of cellars were flooded and some were completely filled with water and mud, the water reaching to the first floor in many instances. These are only typical instances of the damage by the storm. Few sections of the city from Eagle Point and the Brunswick-Balke-Collender Co. factory on the north to Dodge Street and the lumber yards on the south—a distance of about four miles—escaped damage.

City officials estimate that the streets of the city were probably damaged to the extent of $75,000 to $100,000. This may be correct, because many thousands of dollars will be required to clean and repair the streets, while some are beyond repair and will have to be replaced. There are hundreds of individual losses, relatively small.

About 20 small bridges in Dubuque County were damaged or destroyed, causing a loss of nearly $25,000. Total damage from the storm was approximately $125,000. This includes damage to city streets, county roads and bridges, at Union Park, and to homes and factories.

Incidental to the storm of July 9, 1919, it is worthy of note that during the past nine years (1911 to 1919, inclusive) there have been seven storms in which more than 3.00 inches of rain within 24 consecutive hours fell, or more storms of similar intensity than occurred during the 29-year period from 1882 to 1910, inclusive, which gave only six. On the other hand, during the eight-year period from 1874 to 1881, there were nine storms that gave more than 3.00 inches of rain within 24 consecutive hours.

The following table gives the dates of all storms at Dubuque from 1874 to 1919, inclusive, in which 3.00 inches or more of rain fell within 24 consecutive hours:

September 18-19, 1874	3.70	inches
September 8-9, 1875	5.40	"
July 4-5, 1876	4.55	"
September 5, 1876	3.40	"
July 6-7, 1879	3.39	"
June 3-4, 1880	3.03	"
September 25, 1880	3.38	"
July 10, 1881	3.42	"
September 26, 1881	4.01	"
August 23-24, 1885	3.38	"
May 9-10, 1890	3.18	"
June 2-3, 1890	3.04	"
June 16, 1892	3.48	"
July 26, 1896	4.82	"
September 13-14, 1909	3.25	"
August 10-11, 1911	3.75	"
August 18-19, 1912	5.23	"
August 31-September 1, 1914	3.18	"
September 14-15, 1914	3.38	"
September 25-26, 1915	4.79	"
August 16-17, 1918	5.22	"
July 9, 1919	3.87	"

The following table gives the heaviest rainfall in periods of 5 minutes, 10 minutes, 15 minutes, 30 minutes, one hour, and two hours for a number of storms. It shows how much heavier was the rainfall on July 9, 1919, within a one hour period, than during any storm at Dubuque in recent years:

Storm of—	In 5 Min.	In 10 Min.	In 15 Min.	In 30 Min.	In 1 Hr.	In 2 Hrs.	In 24 Hrs.
August 10-11, 1911	.32	.52	.62	.81	1.12	1.97	3.75
August 18-19, 1912	.50	.71	.94	1.46	1.95	2.62	5.23
August 31-September 1, 1914	.41	.72	1.03	1.30	1.68	1.96	3.18
September 14-15, 1914	.34	.51	.58	.73	.85	1.26	3.38
September 25-26, 1915	.34	.46	.53	.68	1.27	2.23	4.79
August 16-17, 1918	.35	.62	.79	1.37	2.10	2.96	5.22
July 9, 1919	.80	1.20	1.52	2.23	2.70	3.03	3.87

From the record of "Excessive" precipitation at Dubuque the following data are taken: On July 4, 1876, 4.55 inches fell in two hours, five minutes. On July 7, 1891, 1.87 inches fell in 27 minutes. On August 18, 1912, 1.81 inches fell in 43 minutes. On August 31, 1914, 1.23 inches fell in 20 minutes. On September 26, 1915, 2.57 inches fell in two hours, 27 minutes. On August 16-17, 1918, 2.48 inches fell in one hour, 18 minutes. On July 9, 1919, 2.65 inches fell in 45 minutes.

AUGUST.

August was a pleasant month with the temperature near the normal. There were no protracted hot spells and after a short period of hot weather during the first week, the rest of the month was generally below the normal. Temperatures exceeding 100° occurred at only a few stations and after the first week the maxima were below 90° over most of the State. The lowest temperature of the month occurred on the last day over practically the entire State and three stations reported light frost. The weather was favorable for the maturing of crops, harvesting and threshing but too dry for plowing and seeding and meadows and pastures were suffering for rain and turning brown at the close of the month, except in a few small areas.

Like July, the precipitation was deficient, except a few small areas, the principal one being a narrow strip in the east-central district, and the distribution uneven. Most of the precipitation occurred during the first half of the month and was sufficient to assure a good corn crop, there being no heavy downpours and all was taken up by the soil.

A small tornado occurred in Butler County on the afternoon of the 4th. It originated several miles north of Dumont and moved southeast striking the edge of Bristow, the length of the path being less than ten miles and the width varying from about 20 feet to more than 1,000 feet. No lives were lost but there was considerable property damage, the buildings and live stock damage being about 12,000 and the loss to crops about $25,000. A severe wind and hail storm occurred on the morning of the 6th in Blackhawk County, in the extreme eastern portion. A number of barns were blown down and in one 17 head of stock were killed by the hay loft falling in; wind towers were bent to the ground, trees uprooted and broken off by the wind and considerable corn was stripped by the hail.

Pressure. The mean pressure (reduced to sea level) for the State was 29.97 inches. The highest recorded was 30.31 inches, at Dubuque, on the 10th, and the lowest was 29.59 inches, at Sioux City, on the 3d. The monthly range was 0.72 of an inch.

Temperature. The mean temperature for the State, as shown by the records of 104 stations, was 71.5°, or 0.3° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 70.3°, or 0.1° lower than the normal; Central, 71.5°, or 0.2° lower than the normal; Southern, 72.8°, or 0.4° lower than the normal. The highest monthly mean was 75.0°, at Omaha, Nebr., and the lowest was 67.8°, at Postville. The highest temperature recorded was 103° at Clarinda on the 6th, and the lowest was 38°, at Inwood, Rock Rapids and Washta, on the 31st. The temperature range for the State was 65°.

Precipitation. The average precipitation for the State, as shown by the records of 111 stations, was 2.59 inches, or 1.09 inches less than the normal. By divisions the averages were as follows: Northern, 2.30 inches, or 1.18 inches less than the normal; Central, 2.98 inches, or 0.79 of an inch less than the normal; Southern, 2.50 inches, or 1.28 inches less than the normal. The greatest amount, 5.72 inches, occurred at Maquoketa, and the least, 0.97 inch, at Sioux Center. The greatest amount in 24 hours, 2.98 inches, occurred at Cedar Rapids, on the 5th.

Humidity. The average relative humidity for the State at 7 a. m. was 80 per cent, and at 7 p. m. it was 56 per cent. The mean for the month was 68 per cent, or 4 per cent lower than the normal. The highest monthly mean was 71 per cent, at Charles City, and the lowest was 64 per cent, at Keokuk.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau station was at the rate of 38 miles an hour, from the west, at Sioux City, on the 3d.

Sunshine. The average per cent of the possible amount of sunshine was 77, or 6 per cent more than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 85; Davenport, 70; Des Moines, 72; Dubuque, 83; Keokuk, 84; Sioux City, 71; Omaha, Neb., 73.

Miscellaneous Phenomena. Aurora, 18th. Fog, 5th, 6th. Frost (light), 31st, at Alton, Fayette and Rock Rapids. Hail, 4th, 5th, 6th, 12th, 24th.

Halo (solar), 13th. Haze, 11th, 19th, 22d, 23d, 24th, 25th, 26th, 27th, 28th, 29th. Thunderstorms, all days except 8th, 10th, 11th, 18th, 22d, 27th, 28th, 29th, 31st. Tornado, 4th.

Rivers. Moderate stages prevailed on the Mississippi and Missouri Rivers, and except a few slight rises, fell steadily throughout the month; on the interior rivers low stages, with a general falling tendency, prevailed.

COMPARATIVE DATA FOR THE STATE—AUGUST.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	68.4	— 3.4	102	36	3.41	—0.27	6.44	1.02	------	8	15	10	6
1891	69.1	— 2.7	106	34	4.24	+0.56	13.02	1.23	------	8	13	12	6
1892	71.4	— 0.4	102	40	2.24	—1.44	4.69	0.65	------	5	18	9	4
1893	69.4	— 2.4	101	30	2.32	—1.26	6.22	0.40	------	5	19	9	3
1894	74.6	+ 2.8	108	38	1.58	—2.10	4.53	T.	------	4	21	8	2
1895	71.9	+ 0.1	103	37	4.43	+0.75	10.63	0.67	------	7	17	9	5
1896	71.7	— 0.1	104	34	3.52	—0.16	12.25	0.86	------	8	15	11	5
1897	68.9	— 2.9	104	35	1.86	—1.82	4.98	0.47	------	6	15	11	5
1898	71.2	— 0.6	103	40	3.44	—0.24	10.55	0.58	------	6	17	9	5
1899	74.4	+ 2.6	100	41	3.68	0.00	10.45	1.12	------	7	17	10	4
1900	77.4	+ 5.6	103	44	4.65	+0.97	10.43	1.26	------	6	18	10	3
1901	73.8	+ 2.0	105	40	1.29	—2.39	4.46	T.	------	5	20	9	2
1902	69.1	— 2.7	98	37	6.58	+2.90	15.47	1.57	------	11	11	11	9
1903	69.1	— 2.7	101	41	6.64	+2.96	17.74	2.55	------	11	12	10	9
1904	69.1	— 2.7	97	35	3.43	—0.25	6.75	0.66	------	7	17	8	6
1905	74.3	+ 2.5	104	44	4.05	+0.37	8.47	1.04	------	9	16	9	6
1906	74.1	+ 2.3	101	33	3.95	+0.27	10.51	0.92	------	9	17	9	5
1907	71.1	— 0.7	99	37	4.33	+0.65	9.67	1.05	------	9	17	9	5
1908	70.0	— 1.8	101	38	4.77	+1.09	10.55	1.35	------	9	17	9	5
1909	76.1	+ 4.3	103	33	1.81	—1.87	8.21	T.	------	5	21	8	2
1910	71.9	+ 0.1	104	36	3.88	+0.20	11.22	0.37	------	8	15	10	6
1911	71.7	— 0.1	107	34	3.32	—0.36	9.47	0.44	------	9	16	10	5
1912	71.0	— 0.8	101	40	3.78	+0.10	7.90	0.89	------	10	15	10	6
1913	76.6	+ 4.8	108	40	2.68	—1.00	7.13	0.08	------	6	17	10	4
1914	73.7	+ 1.9	103	40	2.19	—1.49	4.90	0.42	------	7	17	10	4
1915	65.9	— 5.9	91	30	2.81	—0.87	9.14	0.27	------	8	16	8	7
1916	74.0	+ 2.2	106	35	2.58	—1.10	6.23	0.49	------	7	18	9	4
1917	69.4	— 2.4	102	31	2.29	—1.39	6.31	0.70	------	7	19	8	4
1918	76.0	+ 4.2	113	38	3.61	—0.07	8.38	0.54	------	8	16	10	5
1919	71.5	— 0.3	103	38	2.59	—1.09	5.72	0.97	------	7	19	9	3

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

SEPTEMBER.

Warm, dry, sunshiny weather prevailed till the 17th when heavy to excessive rains set in, followed by a clear, cool period, 22d-27th, and then by heavy, general rains, 28th-30th. Temperatures in the 90's occurred at most stations between the 6th and 10th. Light to heavy frosts with temperatures near freezing occurred in the northwest counties, 23d-25th.

Drouth prevailed in the south and central divisions from about August 14 to September 17, while in the north division rains were generally about normal in amount and frequency after September 2d. Excessive rains occurred at a number of stations on the 18th-19th and 30th. In the west part of Davenport on the 30th, storm drains were not large enough to carry off the water. Basements over a large tract were flooded, street car traffic was seriously impeded, numerous washouts occurred along the line of the Clinton, Davenport & Muscatine Railway, and interurban communication with Muscatine was suspended during the entire day. At Muscatine the damage to bridges, roadways, basements, stocks of goods, houses and household goods is placed at $200,000.

Corn matured and dried rapidly till the rains set in, and about 85 per cent was safe from frost at the close of the month. Silo filling and fodder cutting progressed rapidly. The hard, dry condition of the soil made plowing almost impossible till the 17th. Then the rains came gently, steadily and copiously for the next three or four days, saturating the soil to a great depth. Plowing and winter wheat seeding were pushed rapidly 22d-27th. It is probable that the winter wheat acreage will be reduced to a pre-war basis or about one-third that seeded in the fall of 1918. Pastures recovered from the drouth rapidly. Live stock, which has been fed, began to subsist on pastures toward the end of the month. Stock water and wells which had failed in many places in the south part of the State were replenished. The rains came too late for potatoes which are a poor crop, generally. Many farms have not raised enough for their own use.

Pressure. The mean pressure (reduced to sea level) for the State was 30.00 inches. The highest recorded was 30.33 inches at Dubuque, on the 4th, and the lowest was 29.33 at Davenport, on the 19th. The monthly range was 1.00 inch.

Temperature. The mean temperature for the State, as shown by the records of 100 stations was 67.5°, or 4.1° higher than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 65.4°, or 3.6° higher than the normal; Central, 67.6°, or 4.1° higher than the normal; Southern, 69.4°, or 4.4° higher than the normal. The highest monthly mean was 71.3°, at Northboro, and the lowest, 60.4°, at Northwood. The highest temperature reported was 99° at Maquoketa, on the 7th, Knoxville, on the 9th, and Clarinda on the 10th; and the lowest was 33° at Inwood on the 25th. The temperature range for the State was 66°.

Humidity. The average relative humidity for the State at 7:00 a. m. was 82 per cent and at 7:00 p. m. was 61 per cent. The mean for the month was 72 per cent, which is 2 per cent below normal. The highest monthly mean was 76 per cent at Charles City, and the lowest was 66 per cent at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 108 stations, was 5.34 inches, or 1.98 inches above the normal. By divisions, the averages were as follows. Northern, 3.58 inches, or .53 inch more than the normal: Central, 6.01 inches, or 2.55 inches more than the normal; Southern, 6.43 inches, or 2.87 inches more than the normal. The greatest amount, 11.82 inches, occurred at Grinnell and Corning, and the least, 1.49 inches at Forest City. The greatest amount in 24 consecutive hours, 5.52 inches, occurred at Grinnell, on the 30th.

Wind. The prevailing direction of the wind was from the south. The highest velocity reported from a regular Weather Bureau Station was at the rate of 45 miles an hour from the south at Sioux City, on the 26th.

Sunshine. The average per cent of the possible amount of sunshine was 65, which is 2 per cent above normal. The per cent of the possible amount at regular Weather Bureau Stations was as follows: Charles City, 60; Davenport, 67; Des Moines, 62; Dubuque, 64; Keokuk, 80; Sioux City, 59; Omaha, Neb., 60.

Miscellaneous Phenomena. Aurora, 1st, 2d, 15th, 19th, 20th, 23d, 24th, 25th, 26th, 30th. Fog, dense, 10th, 15th, 16th, 18th, 19th, 23d, 24th, 28th, 30th. Frost, heavy: Northern Division, 25th. Light: Northern Division, 12th, 20th, 22d, 23d, 24th, 25th, 26th. Central Division, 12th. Hail, 20th. Halo (Lunar or solar): 1st, 12th, 16th. Rainbow, 20th, 21st. Thunderstorms, 2d, 3d, 9th, 10th, 13th, 16th, 17th, 18th, 19th, 20th, 21st, 25th, 27th, 28th, 29th, 30th.

Rivers. Though many heavy rains occurred, beginning the 17th, the rate at which they fell was generally slow, and as the ground was very dry from more than a month of drouth, little of the rain reached the streams as a rule till the 30th, and no large rises in the streams had occurred up to the close of the month.The largest rise was 3.9 feet at Van Meter on the Raccoon in the five-day period ending the 22d. This rise was quite noticeable at Ottumwa on the Des Moines, where it amounted to 3.3 feet in the four-day period ending on the 22d. On the Mississippi and Missouri Rivers rather low stages prevailed.

COMPARATIVE DATA FOR THE STATE—SEPTEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	59.3	— 4.1	96	23	2.97	—0.39	4.85	1.36	------	7	13	10	7
1891	67.3	+ 3.9	104	28	1.33	—2.03	3.60	0.13	------	4	20	7	3
1892	64.7	+ 1.3	99	29	1.53	—1.83	4.15	0.16	------	4	16	8	6
1893	64.7	+ 1.3	102	18	2.34	—1.02	5.49	0.74	------	4	20	6	4
1894	65.1	+ 1.7	100	26	3.57	+0.21	7.43	0.67	------	8	15	10	5
1895	66.8	+ 3.4	103	22	3.03	—0.33	7.43	0.85	------	5	18	8	4
1896	58.5	— 4.9	95	22	4.09	+0.73	9.96	1.82	------	10	11	9	10
1897	70.9	+ 7.5	106	26	2.04	—1.32	5.88	0.00	------	4	23	5	2
1898	65.3	+ 1.9	99	29	2.69	—0.67	8.45	0.41	------	7	16	9	5
1899	62.5	— 0.9	104	15	0.93	—2.43	4.32	T.	------	4	16	9	5
1900	64.4	+ 1.0	99	26	4.98	+1.62	8.82	2.48	------	9	15	8	7
1901	63.3	— 0.1	102	26	4.77	+1.41	13.62	1.71	------	9	13	9	8
1902	59.1	— 4.3	88	23	4.35	+0.99	10.41	1.65	------	9	15	6	9
1903	60.8	— 2.6	94	28	3.81	+0.45	8.79	1.42	------	10	14	6	10
1904	64.0	+ 0.6	94	30	2.78	—0.58	8.33	0.09	------	7	13	8	9
1905	65.8	+ 2.4	96	36	3.81	+0.45	13.18	0.50	------	8	14	8	8
1906	67.2	+ 3.8	100	27	4.16	+0.80	11.10	0.64	------	8	16	8	6
1907	62.8	— 0.6	98	25	2.75	—1.61	6.06	1.38	------	8	15	9	6
1908	67.9	+ 4.5	98	20	1.20	—2.16	3.46	0.25	------	3	21	6	3
1909	62.4	— 1.0	94	30	3.58	+0.22	7.34	1.39	------	9	14	8	8
1910	63.2	— 0.2	99	30	3.59	+0.23	7.43	1.18	------	9	14	7	9
1911	65.8	+ 2.4	103	32	5.12	+1.76	13.73	1.19	------	10	11	9	10
1912	62.1	— 1.3	104	24	3.98	+0.62	10.12	0.28	------	11	12	8	10
1913	64.5	+ 1.1	107	19	3.31	—0.05	7.44	0.45	------	9	15	8	7
1914	64.5	+ 1.1	99	30	7.88	+4.52	16.24	2.48	------	10	16	7	7
1915	63.7	+ 0.3	91	30	6.03	+2.67	12.45	2.88	------	11	11	8	11
1916	62.5	— 0.9	98	21	3.89	+0.53	9.71	1.45	------	7	17	8	5
1017	62.6	— 0.8	97	28	2.90	—0.46	8.68	0.39	------	7	15	7	8
1918	58.6	— 4.8	93	20	1.87	—1.49	4.62	0.48	------	6	16	8	6
1919	67.5	+ 4.1	99	33	5.34	+1.98	11.82	1.49	------	8	16	6	8

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

OCTOBER.

The mean temperature for October averaged slightly below the normal for the State, but the departures varied greatly with a deficiency of nearly four degrees along the extreme western counties and an excess of nearly three degrees over a large portion of the southeastern and east-central sections. Killing frosts occurred during the month over the entire State, the date varying from the 10th and 11th over most of the western and central portions until as late as the 31st at points along the Mississippi River.

The precipitation was above the normal, though very unevenly distributed, varying from less than half an inch in Sioux County to nearly nine inches in Delaware County, but the time of occurrence was nearly uniform throughout the month over the entire State. Rainy days averaged 10 and equaled the frequency of October, 1911, which has held the record since the State-wide records have been kept; and the largest monthly total, 8.65 inches, has been exceeded only in October, 1908, when a fall of 8.83 inches was recorded. Another unusual downpour occurred at Dubuque on the 4th. See special article, page 35.

The month was generally favorable for pastures and the seeding and germination of winter wheat but too wet for corn husking, and this condidition in connection with the large number of cloudy days and deficient sunshine delayed the drying of corn so that at the end of the month very little had been cribbed. Winter wheat in the early sown fields is up to a good stand but the acreage has been grealy reduced. Notwithstanding the frequent rains, the roads were in bad condition for but short periods, but over a large portion of the eastern half of the State it was impossible to haul full loads of corn from the fields the greater part of the month.

Pressure. The mean pressure (reduced to sea level) for the State was 30.03 inches. The highest recorded was 30.45 inches, at Sioux City, on the 10th, and the lowest was 29.39 inches at Omaha, Nebr., on the 8th. The monthly range was 1.06 inches.

Temperature. The mean temperature for the State, as shown by the records of 101 stations, was 50.7°, or 0.1° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 47.6°, or 1.4° lower than the normal; Central, 51.3°, or 0.4° higher than the normal; Southern, 53.2°, or 0.6° higher than the normal. The highest monthly mean was 56.5°, at Keokuk, and the lowest was 43.8°, at Rock Rapids. The highest temperature reported was 89°, at Nora Springs, Carroll and Clarinda, on the 2d; the lowest was 8°, at Inwood, on the 28th. The temperature range for the State was 81°.

Humidity. The average relative humidity for the State at 7 A. M. was 85 per cent, and at 7 P. M. it was 70 per cent. The mean for the month was 78 per cent, or 6 per cent greater than the normal. The highest monthly mean was 81 per cent at Davenport, and the lowest was 74 per cent at Omaha, Nebr. The lowest observed was 30 per cent at Sioux City on the 7th.

Precipitation. The average precipitation for the State, as shown by the records of 110 stations was 3.02 inches, or 0.56 inch greater than the normal. By divisions the averages were as follows: Northern, 2.30 inches, or 0.04 inch less than the normal; Central, 3.99 inches, or 1.56 inches greater than the normal; Southern, 2.77 inches, or 0.23 inch greater than the normal. The greatest amount, 8.65 inches, occurred at Delaware, and the least, 0.45 inch, occurred at Sioux Center. The greatest amount in 24 consecutive hours, 3.85 inches, occurred at Grundy Center, on the 4th.

Snow. Light snow occurred in the northwest portion of the State on the 16th, 24th, 25th, 26th and 27th, and at its maximum totaled 1.9, at Storm Lake. The snow was soon melted.

Wind. The prevailing direction of the wind was south. The highest velocity reported from a regular Weather Bureau station was 40 miles per hour, from the northwest, at Sioux City on the 9th.

Sunshine and Cloudiness. The average per cent of the possible amount of sunshine was 49, or 13 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 42; Davenport, 51; Des Moines, 51; Dubuque, 51; Keokuk, 62; Sioux City, 42; Omaha, Nebr., 49.

Miscellaneous Phenomena. Aurora, 1st, 2d, 3d, 15th, 22d, 23d, 26th, 29th, 31st. Fog, 1st, 4th, 9th, 12th, 13th, 14th, 17th, 20th, 23d, 24th, 25th, 26th.

27th, 28th, 29th, 30th. Frost, killing, Northern Division—10th, 11th, 12th, 16th, 17th, 19th, 21st, 23d, 24th, 25th, 26th, 27th, 28th, 29th, 31st; Central Division—10th, 11th, 12th, 16th, 17th, 18th, 20th, 21st, 22d, 25th, 26th, 28th, 29th, 31st; Southern Division—11th, 12th, 16th, 17th 21st, 26th, 28th, 29th. Hail, 3d, 24th. Halos (Lunar or Solar), 4th, 11th. Rainbow, 4th, 18th, 19th. Sleet 26th. Thunderstorms, 1st, 2d, 3d, 4th, 5th, 8th, 9th, 10th, 15th, 16th, 18th, 19th, 20th, 21st, 24th, 25th, 26th, 27th, 28th, 29th, 30th, 31st.

Rivers. A moderate rise occurred on the Missouri River on the 2d and after the passing of the crest the stage remained nearly stationary the rest of the month. On the Mississippi and interior rivers a sharp rise occurred during the first week, due to heavy rain over most eastern and north-central sections, after which falling stages were the rule.

COMPARATIVE DATA FOR THE STATE—OCTOBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	49.2	— 1.6	86	16	3.48	+1.02	6.82	1.59	------	7	11	11	9
1891	50.0	— 0.8	92	19	2.77	+0.31	6.53	0.85	------	6	18	7	6
1892	54.5	+ 3.7	96	14	1.55	—0.91	2.58	0.00	0.0	4	21	6	4
1893	52.4	+ 1.6	94	10	1.28	—1.18	4.56	0.02	0.0	4	16	9	6
1894	51.7	+ 0.9	90	20	2.67	+0.21	5.25	0.03	0.2	8	14	8	9
1895	46.0	— 4.8	88	4	0.47	—1.99	1.38	0.00	T.	2	19	8	4
1896	47.9	— 2.9	88	12	3.13	+0.67	5.05	1.51	T.	5	18	6	7
1897	56.8	+ 6.0	97	12	1.14	—1.32	3.30	0.03	0.0	4	17	8	6
1898	47.5	— 3.3	88	17	3.56	+1.10	5.75	1.27	3.6	8	7	9	15
1899	56.7	+ 5.9	95	17	1.73	—0.73	4.64	0.15	0.0	5	17	8	6
1900	59.3	+ 8.5	90	21	3.91	+1.45	8.00	1.20	0.0	7	16	7	8
1901	54.2	+ 3.4	88	20	1.98	—0.48	4.23	0.45	T.	6	17	7	7
1902	53.5	+ 2.7	83	20	2.54	+0.08	6.66	0.28	T.	5	16	8	7
1903	52.2	+ 1.4	90	16	1.95	—0.51	4.50	0.32	0.0	5	19	6	6
1904	53.1	+ 2.3	96	16	1.67	—0.79	4.43	0.14	T.	6	15	8	8
1905	49.2	— 1.6	95	16	3.40	+0.94	5.36	1.20	1.6	8	16	6	9
1906	50.5	— 0.3	87	7	1.96	—0.50	4.25	0.50	0.1	6	14	7	10
1907	50.4	— 0.4	85	10	1.50	—0.96	3.71	0.30	0.0	5	20	5	6
1908	51.1	+ 0.3	89	17	3.38	+0.92	8.83	0.58	2.6	8	16	6	9
1909	49.7	— 1.1	97	10	2.22	—0.24	4.70	0.48	T.	6	16	6	9
1910	55.2	+ 4.4	93	10	0.77	—1.69	1.73	T.	0.1	4	21	4	6
1911	48.7	— 2.1	87	14	3.34	+0.88	7.03	0.73	0.6	10	12	8	11
1912	52.2	+ 1.4	92	16	2.98	+0.52	5.77	1.03	T.	6	21	3	7
1913	49.2	— 1.6	89	—2	3.03	+0.57	7.29	0.35	1.2	9	15	8	8
1914	55.9	+ 5.1	88	14	3.23	+0.77	6.64	0.74	T.	9	16	6	9
1915	54.4	+ 3.6	86	19	1.31	—1.15	3.25	T.	T.	5	19	6	6
1916	50.9	+ 0.1	92	6	2.00	—0.46	4.33	0.20	2.0	8	16	7	8
1917	42.9	— 7.9	85	0	1.41	—1.05	4.00	0.15	2.2	6	10	11	10
1918	55.1	+ 4.3	93	21	3.64	+1.18	7.56	1.36	0.8	7	13	7	11
1919	50.7	— 0.1	89	8	3.02	+0.56	8.65	0.45	T.	10	11	8	12

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

INTENSE RAINSTORM OF OCTOBER 4, 1919, AT DUBUQUE

By James H. Spencer, Meteorologist.

Weather Bureau, Dubuque, Iowa, October 20, 1919.

On October 4th Dubuque was again visited, for the second time during 1919, by a rainstorm of great intensity. The fall within an hour (2.66 inches) has been exceeded since the beginning of record 46 years ago, only by the storm of July 9, 1919, and probably by the storm of July 4-5, 1876. The storm of October 4th gave a total of 3.38 inches, as compared to a total of 3.87 inches on July 9th. Rainfall was not remarkable on either date for "total" amount, but for intensity of fall within an hour.

During the week preceding the storm of October 4th the weather was continuously unsettled, with thunder showers every day. The week beginning September 28, 1919, in fact, was the wettest "first week in October" on record at this station, utterly spoiling the Fall Festival then in progress at Dubuque.

The great downpour occurred between 3:13 P. M. and 4:39 P. M., 90th meridian time, and was preceded by and followed by light rain. Rainfall was excessive from 3:18 P. M. until 4.38 P. M., and accumulated amounts during this period were as follows:

	Inches.		Inches.
5 minutes	.15	35 minutes	2.18
10 "	.35	40 "	2.33
15 "	.70	45 "	2.44
20 "	1.27	50 "	2.54
25 "	1.63	60 "	2.66
30 "	1.98	80 "	2.97

The following table gives the greatest amount of rainfall in 5, 10, 15, 30, 45, 60 and 120 minutes during the storm of October 4th, as compared to the storm of July 9, 1919:

Greatest amount in—	Storm of July 9th. Inches.	Storm of Oct. 4th. Inches.
5 minutes	.80	.59
10 "	1.20	.96
15 "	1.52	1.35
30 "	2.23	2.06
45 "	2.64	2.43
One Hour	2.70	2.66
Two Hours	3.03	3.06

The storm of October 4th was more local in character than that of July 9th, and the area of heavy rainfall did not extend to Union Park, where great damage resulted on July 9th. Intense rainfall, however, fell over the entire city, causing great damage to brick pavements on water-way streets. The effects of the storm within the city limits were practically a repetition of what occurred on July 9th.

The brick surface of Eighth, a steep water-way street, was again ripped off for several blocks. Seventeenth and Twenty-second streets experienced similar damage, as on Eighth, though much less steep. Seventeenth was not much damaged on July 9th. Kaufmann avenue was in process of repaving due to damage from the storm of July 9th, and much of the new work was ruined as before, causing heavy loss to the contractor. East of Clay and north of Sixteenth, a flat, residential section two or more blocks wide and more than a mile long, became a temporary lake during the storm and scores of cellars in this section were flooded and considerable property damaged.

There was other damage of a less serious nature in various parts of the city. The bathing beach property at Eagle Point, for instance, was much damaged for the third time this season. Losses outside the city were not heavy. Four small county bridges were damaged or destroyed by freshets, the loss amounting to about $3,000.

The total loss from this storm is estimated at about $60,000, at least two-thirds of which amount was to city streets. Fortunately, in this storm no lives were lost, as on July 9th.

NOVEMBER.

Excepting a small area extending from Page northeast to Madison counties, temperatures averaged below normal, the average daily deficiency being 1.4 degrees. Cold waves occurred on the 11th-12th and 25th-26th, and a warm period from about the 15th to the 24th. On the 13th a temperature of —12 observed at Alton is the lowest November temperature in Iowa since 1905.

Precipitation was evenly distributed and considerably above normal in all sections, resulting mostly from two storm periods, 9th-10th and 27th-29th. In the first period appreciable snow covered the northwest half of the State and in the second all portions were covered heavily, except the Mississippi River counties where it was light.

Wet fields and rainy days continued to delay corn husking till after the 10th when cold, drying weather permitted rapid progress and improved the roads so that much corn was marketed. Southwest gales on the 10th blew down much corn in the eastern half of the State. Considerable of this in the south-central and southeast counties was covered by snow toward the close of the month. Due to the high cost of husking, which averaged 8 cents per bushel, nearly 8 per cent of the corn was "hogged down" this year. At the close of November, 11 per cent of the corn remained unhusked as compared with 9 per cent in 1918.

Winter wheat entered the winter in good condition, 92 per cent of the acreage seeded having become well established. The severe temperatures of the month and the glaze storm of the 28th-29th were preceded by ample snow covering. Wires were damaged by the glaze in the Mississippi River counties.

Pressure. The mean pressure (reduced to sea level) for the State was 30.11 inches. The highest recorded was 30.74 inches, at Sioux City, on the 27th, and the lowest was 29.09 inches, at Dubuque, on the 29th. The monthly range was 1.65 inches.

Temperature. The mean temperature for the State, as shown by the records of 98 stations was 33.6°, or 1.4° lower than the normal. By divisions, three tiers of counties to the division, the means were as follows: Northern, 30.5°, or 2.3° lower than the normal; Central, 33.9°, or 1.2° lower than the normal; Southern, 36.5, or 0.6° lower than the normal. The highest monthly mean was 39.3°, at Keokuk, and the lowest was 28.1°, at Rock Rapids. The highest temperature recorded was 68° at Creston on the 1st, Lamoni on the 3d, and Harlan on the 16th, and the lowest, —12° at Alton, on the 13th. The temperature range for the State was 80°.

Humidity. The average relative humidity for the State at 7 a. m. was 82 per cent and at 7 p. m., 69 per cent. The mean for the month was 76 per cent, which is about normal. The highest mean was 82 per cent at Charles City, and the lowest, 72 per cent, at Keokuk.

Precipitation. The average precipitation for the State, as shown by the records of 104 stations, was 3.40 inches, or 1.89 inches above the normal. By divisions the averages were as follows: Northern, 3.15 inches, or 1.74 inches greater than the normal; Central, 3.39 inches, or 1.86 inches greater than the normal; Southern, 3.66 inches, or 2.08 inches greater than the normal. The greatest amount, 6.22 inches, occurred at Indianola, and the least, 1.97 inches, at Storm Lake. The greatest amount in 24 consecutive hours, 3.85 inches, occurred at Thurman, on the 9th.

Snowfall. The average fall for the State was 6.3 inches, which is 3.8 inches more than the normal. The heaviest fall was 17.0 inches at Harlan. Practically the entire fall of snow occurred on the 27th, 28th and 29th, when one of the largest November snows on record occurred over a large portion of the State. The snowfall was light over the extreme east-central and southeast portions, a few stations reporting less than 1.0 inch.

Wind. The prevailing direction of the wind was from the northwest. The highest velocity reported from a regular Weather Bureau station was at the rate of 63 miles an hour, from the southwest, at Keokuk on the 10th. This is the highest of record in this State in November.

Sunshine. The average per cent of the possible amount of sunshine was 47, or 7 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 36; Davenport, 52; Des Moines, 50; Dubuque, 49; Keokuk, 51; Sioux City, 41; Omaha, Nebr., 48.

Miscellaneous Phenomena. Aurora 11th, 29th. Fog, dense, 2d, 7th, 8th, 9th, 21st, 29th. Halo, lunar, 4th, 18th, 29th. Halo, solar, 2d, 12th, 16th, 17th, 18th, 24th. Meteor, 2d. Sleet, 10th, 27th, 28th, 29th. Thunderstorms, 6th, 8th, 9th, 10th, 18th, 24th, 25th.

Rivers. Heavy rains, 9th-10th, caused sharp rises in the Mississippi and the interior rivers of the State, amounting to 5 to 7 feet in the latter. At Ottumwa, on the Des Moines river, the crest stage, 8.8 feet, is within 1.2 feet of the flood stage.

COMPARATIVE DATA FOR THE STATE—NOVEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	38.6	+ 3.6	78	— 2	1.46	—0.05	3.55	0.71	------	3	15	8	7
1891	30.5	— 4.5	84	—24	1.70	+0.19	3.64	0.06	------	7	10	8	12
1892	33.3	— 1.7	70	— 3	1.10	—0.41	3.16	0.05	1.8	4	11	8	11
1893	34.0	— 1.0	86	—13	1.17	—0.34	2.56	0.05	4.6	4	16	8	6
1894	32.7	— 2.3	72	— 5	0.92	—0.59	2.42	T.	0.4	4	9	11	10
1895	34.3	— 0.7	86	—12	1.51	0.00	3.01	0.45	4.9	6	9	8	13
1896	29.6	— 5.4	82	—15	1.83	+0.32	4.51	0.16	2.9	6	9	8	13
1897	34.3	— 0.7	81	—19	0.66	—0.85	2.24	T.	1.2	5	12	8	10
1898	32.2	— 2.8	78	—17	1.50	—0.01	3.61	0.33	8.7	6	14	8	8
1899	43.9	+ 8.9	86	8	1.20	—0.31	2.97	0.13	0.5	5	12	8	10
1900	33.5	— 1.5	79	— 6	1.06	—0.45	3.35	T.	3.7	6	12	7	11
1901	35.8	+ 0.8	77	2	0.86	—0.65	2.30	0.20	2.6	3	18	6	6
1902	41.2	+ 6.2	79	4	2.13	+0.62	4.19	0.16	1.8	7	9	7	14
1903	34.2	— 0.8	76	— 5	0.52	—0.99	1.74	T.	1.1	3	13	8	9
1904	41.0	+ 6.0	80	4	0.15	—1.36	0.50	0.00	0.5	1	20	6	4
1905	38.4	+ 3.4	70	—12	2.84	+1.33	5.30	0.90	0.6	5	16	7	7
1906	35.4	+ 0.4	76	— 5	2.03	+0.52	3.86	0.35	4.4	8	9	7	14
1907	36.7	+ 1.7	68	— 4	1.03	—0.48	2.27	0.05	0.9	4	17	6	7
1908	39.3	+ 4.3	80	5	1.56	+0.05	3.31	0.21	1.4	5	14	7	9
1909	42.4	+ 7.4	84	— 3	5.39	+3.88	11.48	2.07	6.8	10	10	7	13
1910	33.4	— 1.6	76	5	0.34	—1.17	1.03	T.	0.7	3	13	9	8
1911	29.9	— 5.1	79	— 8	1.42	—0.09	4.99	0.11	1.6	6	11	8	11
1912	40.1	+ 5.1	77	6	0.98	—0.53	2.38	0.00	T.	2	18	8	4
1913	44.1	+ 9.1	78	10	1.18	—0.33	3.49	0.20	0.4	6	11	7	12
1914	41.0	+ 6.0	80	— 4	0.22	—1.29	0.95	0.00	T.	2	19	6	5
1915	40.2	+ 5.2	83	— 5	1.94	+0.43	4.86	0.30	1.2	6	11	10	9
1916	37.3	+ 3.3	80	— 8	1.61	+0.10	3.65	0.05	3.6	5	16	6	8
1917	40.7	+ 5.7	77	3	0.28	—1.23	1.02	T.	1.4	3	14	6	10
1918	39.9	+ 4.9	76	0	2.11	+0.60	5.10	0.70	4.4	7	13	5	12
1919	33.6	— 1.4	68	—12	3.40	+1.89	6.22	1.97	6.3	8	11	7	12

T indicates an amount too small to measure, or less than .005 inch precipitation, and less than .05 inch snowfall.

DECEMBER.

Wintry weather was the outstanding feature. Though not the coldest December for the State as a whole, stations in the eastern half, having records that began since 1876, established new records for low mean temperature. The first three weeks of the month were colder than any other similar period of record. A well-defined cold wave occurred on the 12th-13th and another was sweeping southward across the State on the 31st. December 10th was severely cold. In the morning of that date local areas in Hardin, Grundy, Poweshiek, Dallas, Fremont and Taylor counties experienced temperatures of 30° below zero or lower, which have never before been recorded so early in the winter.

Precipitation, mainly snow, was general on the 1st, and 6th-9th, and scattered on a few other dates. It was well distributed, but below normal, at all stations except Earlham. Under the snow covering, the ground froze but a few inches and where the snow was a foot or more deep it scarcely froze at all, in spite of the low temperature. The snow covering was continuous throughout the State, except the southern tier of counties and along the Mississippi river south of Davenport, where the ground became bare toward the close of the month. From Pottawattamie and

Shelby counties east-northeast over Polk county, from 12 to 20 inches of snow lay on the ground from the 9th to the 20th.

Grasses and winter grains were well protected during the severe temperatures. Drifting snow delayed transportation by rail and automobile during the first half of the month. During the last week the snow melted rapidly. Live stock were permitted to graze in the cornfields. Corn husking and shelling and fodder shredding were resumed, though shelling and marketing were limited by car shortage, the elevators being filled to capacity.

PRESSURE.

The mean pressure (reduced to sea level) for the State was 30.22 inches. The highest recorded was 30.98 inches, at Keokuk, on the 10th, and the lowest was 29.56 inches at Davenport on the 12th. The monthly range was 1.42 inches.

TEMPERATURE.

The mean temperature for the state, as shown by the records of 98 stations, was 15.0, or 8.9° lower than the normal. By divisions, three tiers of counties to the division, the mean temperatures were as follows: Northern, 12.4° or 8.8° lower than the normal; Central, 14.8° or 9.3° lower than the normal; Southern, 17.9°, or 8.5° lower than the normal. The highest monthly mean was 22.3°, at Keokuk, and the lowest monthly mean was 10.1°, at New Hampton. The highest temperature reported was 52° at Lamoni, on the 30th, and the lowest temperature reported was -36°, at Thurman, on the 10th, the range for the State being 88°.

HUMIDITY.

The average relative humidity for the State at 7 a. m. was 86 per cent, and at 7 p. m. it was 81 per cent. The mean for the month was 84 per cent, or about 3 per cent above normal. The highest monthly mean was 90 per cent, at Charles City, and the lowest mean was 82 per cent, at Des Moines.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 109 stations, was 0.54 inch, or 0.68 inch less than the normal. By divisions, the averages were as follows: Northern, 0.46 inch, or 0.61 inch less than the normal; Central, 0.58 inch, or 0.67 inch less than the normal; Southern, 0.54 inch, or 0.68 inch less than the normal. The greatest amount, 1.55 inches, occurred at Earlham, and the least, 0.08 inch, at Albia. The greatest amount in any 24 consecutive hours, 0.70 inch, occurred at Waverly, on the 9th.

SNOW.

The average snowfall for the State was 5.8 inches, or 0.4 inch below normal. The greatest amount, 16.0 inches, occurred at Earlham, and the least, 0.5 inch, at Keokuk.

WIND.

The prevailing direction of the wind was from the northwest. The highest velocity was at the rate of 36 miles an hour from the northwest, at Sioux City, on the 12th.

SUNSHINE AND CLOUDINESS.

The average percentage of the possible amount of sunshine was 4 per cent, or about 8 per cent less than the normal. The per cent of the possible amount at the regular Weather Bureau stations was as follows: Charles City, 33; Davenport, 38; Des Moines, 37; Dubuque, 38; Keokuk, 48; Sioux City, 47; and Omaha, Neb., 47 per cent. The average number of clear days was 11; partly cloudy, 7; cloudy, 13.

MISCELLANEOUS PHENOMENA.

Aurora: 29th.

Fog; dense: 19th, 20th, 21st, 22d, 23d, 24th, 25th, 26th, 28th.

Halos, lunar and solar: 1st, 5th, 7th, 9th, 10th, 11th, 12th, 16th, 29th, 30th.

Sleet: 5th, 6th, 9th, 19th, 28th.

COMPARATIVE DATA FOR THE STATE—DECEMBER.

YEAR	Temperature				Precipitation					Number of Days			
	Mean	Departure	Highest	Lowest	Total	Departure	Greatest	Least	Snowfall	With pre. .01 in. or more	Clear	Partly cloudy	Cloudy
1890	29.1	+ 5.2	72	—18	0.45	—0.77	1.40	0.00	------	3	17	7	7
1891	32.3	+ 8.4	72	—14	2.41	+1.19	4.50	1.21	------	6	14	9	8
1892	18.9	— 5.0	68	—29	1.65	+0.43	3.04	0.20	10.9	8	9	8	14
1893	22.0	— 1.9	70	—21	1.31	+0.09	2.80	0.46	7.6	7	10	9	12
1894	30.1	+ 6.2	73	—17	0.95	—0.27	1.75	0.25	1.3	3	15	6	10
1895	25.4	+ 1.5	63	—16	1.63	+0.41	5.74	0.00	4.1	5	11	9	11
1896	30.8	+ 6.9	70	—10	0.65	—0.57	1.79	T.	1.6	4	10	8	13
1897	18.0	— 5.9	60	—25	1.65	+0.43	3.22	0.61	15.9	6	11	7	13
1898	18.1	— 5.8	60	—25	0.48	—0.74	1.70	T.	3.9	3	15	8	8
1899	22.6	— 1.3	75	—19	1.61	+0.39	4.28	0.10	4.3	5	12	9	10
1900	26.9	+ 3.0	63	—10	0.45	—0.77	2.70	T.	2.4	4	13	6	12
1901	20.5	— 3.4	64	—31	0.93	—0.29	2.75	0.05	5.4	6	10	9	12
1902	20.1	— 3.8	59	—20	2.23	+1.01	5.51	0.67	12.9	8	9	6	16
1903	19.6	— 4.3	58	—27	0.41	—0.81	1.96	T.	3.7	4	11	9	11
1904	23.4	— 0.5	67	—19	1.44	+0.22	3.68	0.06	12.3	5	12	7	12
1905	27.0	+ 3.1	62	—11	0.52	—0.70	1.69	T.	4.2	3	19	6	6
1906	25.7	+ 1.8	65	— 9	1.43	+0.21	2.81	0.37	1.4	6	11	7	13
1907	28.8	+ 4.9	62	— 9	1.00	—0.22	2.28	0.05	4.7	5	10	7	14
1908	27.2	+ 3.3	67	—17	0.57	—0.65	2.07	0.05	3.8	3	15	8	8
1909	15.1	— 8.8	60	—26	2.18	+0.96	6.10	0.89	13.7	11	10	5	16
1910	23.4	— 0.5	57	—14	0.37	—0.85	1.39	0.01	3.0	3	15	7	9
1911	27.9	+ 4.0	60	—24	2.57	+1.35	4.43	0.62	12.6	7	13	6	12
1912	29.2	+ 5.3	64	—13	0.74	—0.48	1.75	0.10	1.1	3	18	7	6
1913	32.0	+ 8.1	65	—13	1.02	—0.20	4.73	0.00	1.3	4	15	5	11
1914	15.7	— 8.2	63	—31	1.30	+0.80	2.24	0.57	11.1	9	10	6	15
1915	25.0	+ 1.1	56	—10	0.69	—0.53	1.70	T.	4.6	5	11	8	12
1916	18.7	— 5.2	67	—25	1.04	—0.18	2.00	0.35	6.7	6	15	8	8
1917	14.5	— 9.4	62	—40	0.56	—0.66	1.70	0.14	6.7	6	10	9	12
1918	32.7	+ 8.8	68	— 7	1.30	+0.08	3.30	0.37	5.1	8	9	8	14
1919	15.0	— 8.9	52	—36	0.54	—0.68	1.55	0.08	5.8	4	11	7	13

T. indicates an amount too small to measure, or less than .005 inch precipitation and less than .06 inch snowfall.

MONTHLY STATE DATA FOR 1919.

Month.	Barometeric Pressure, Inches (Sea Level).					Temperature, Degrees, F.				Relative Humidity Per Cent.					Precipitation, Inches.					Number of Days.				Sunshine.		Wind.		
	Mean.	Highest.	Date.	Lowest.	Date.	Mean.	Departure from normal.	Highest.	Lowest.	7 a. m.*	12 noon.§	7 p. m.*	Departure from normal.¶	Lowest.	Average.	Departure from normal.	Greatest.	Least.	Snowfall.	With .01 inch or more precipitation.	Clear.	Partly cloudy.	Cloudy.	Per cent of the possible amount.	Departure from normal.	Average hourly velocity.	Departure from normal.	Prevailing direction.
January	30.10	30.65	3	29.68	24	26.8	+8.9	64	—32	85	69	73	— 3	27	0.24	—0.81	0.86	T.	2.8	2	20	5	6	68	+18	7.4	—1.3	SW.
February	30.00	30.61	19	28.96	13	24.9	+4.4	65	—16	86	73	76	+ 1	44	2.42	+1.27	4.12	1.09	9.9	8	11	5	12	51	— 5	9.6	+0.3	NW.
March	30.17	30.80	21	29.47	14	37.5	+4.2	78	—11	83	65	68	+ 2	34	2.33	+0.56	5.40	0.81	1.1	6	15	8	8	60	+ 2	8.8	—1.1	SE.
April	29.97	30.66	24	29.23	6	48.4	—0.3	81	20	81	65	66	+ 7	23	4.78	+1.92	9.00	1.94	0.7	14	8	8	14	44	—16	9.4	—0.5	SE.
May	29.95	30.35	5	29.53	31	58.2	—2.3	93	30	79	58	58	0	31	3.11	—1.46	7.14	0.73	T.	9	13	11	7	59	— 3	7.5	—1.2	SE.
June	30.01	30.30	13	29.66	23	71.9	+2.8	98	41	85	65	68	+ 6	35	6.13	+1.75	12.25	1.82	0	13	12	12	6	60	— 9	6.8	—0.8	SE.
July	29.98	30.24	8	29.61	26	77.4	+3.3	104	41	75	50	52	— 4	26	2.86	—1.10	7.82	0.39	0	6	22	8	1	82	+ 8	6.9	+0.2	SW.
August	29.97	30.31	10	29.59	3	71.5	—0.3	103	38	80	54	56	— 4	27	2.59	—1.09	5.72	0.97	0	7	19	9	3	77	+ 6	6.3	0.0	NW.
September	30.00	30.33	4	29.33	19	67.5	+4.1	99	33	82	56	61	— 2	29	5.34	+1.98	11.82	1.49	0	8	16	6	8	65	+ 2	7.1	—0.1	S.
October	30.03	30.45	10	29.39	8	50.7	—0.1	89	8	85	64	70	+ 6	30	3.02	+0.56	8.65	0.45	T.	10	11	8	12	49	—13	7.3	—0.8	S.
November	30.11	30.74	27	29.09	29	33.6	—1.4	68	—12	82	64	69	0	36	3.40	+1.89	6.22	1.97	6.3	8	11	7	12	47	— 7	8.9	+0.7	NW.
December	30.22	30.98	10	29.56	12	15.0	—8.9	52	—36	86	76	81	+ 3	33	0.54	—0.68	1.55	0.08	5.8	4	11	7	13	40	— 8	7.7	—0.4	NW.
Means and	30.04	-----	Dec.	-----	Feb.	48.6	+1.2	----	----	82	63	66	+ 1	----	36.76	+4.79	-----	----	26.6	95	169	94	102	59	— 2	7.8	—0.4	SE.
extremes	-----	30.98	10	28.96	13	----	-----	104	—36	----	----	----	----	23	----	-----	12.25	T.	----	----	----	----	----	----	----	----	-----	-----
Normals and	30.02	-----	Jan.†	-----	Feb.‡	47.4	-----	----	----	81	----	66	----	----	31.97	-----	----	----	30.2	85	166	101	98	61	----	8.2	-----	NW.
record	-----	31.09	1905 †25th	28.69	1902 ‡28th	----	-----	113	—47	----	----	----	----	5	----	-----	19.88	0.00	----	----	----	----	----	----	----	----	-----	-----

§Local mean time. *Normal central time. ¶7 a. m. and 7 p. m. observations only.

COMPARATIVE DATA FOR THE STATE—Annual.

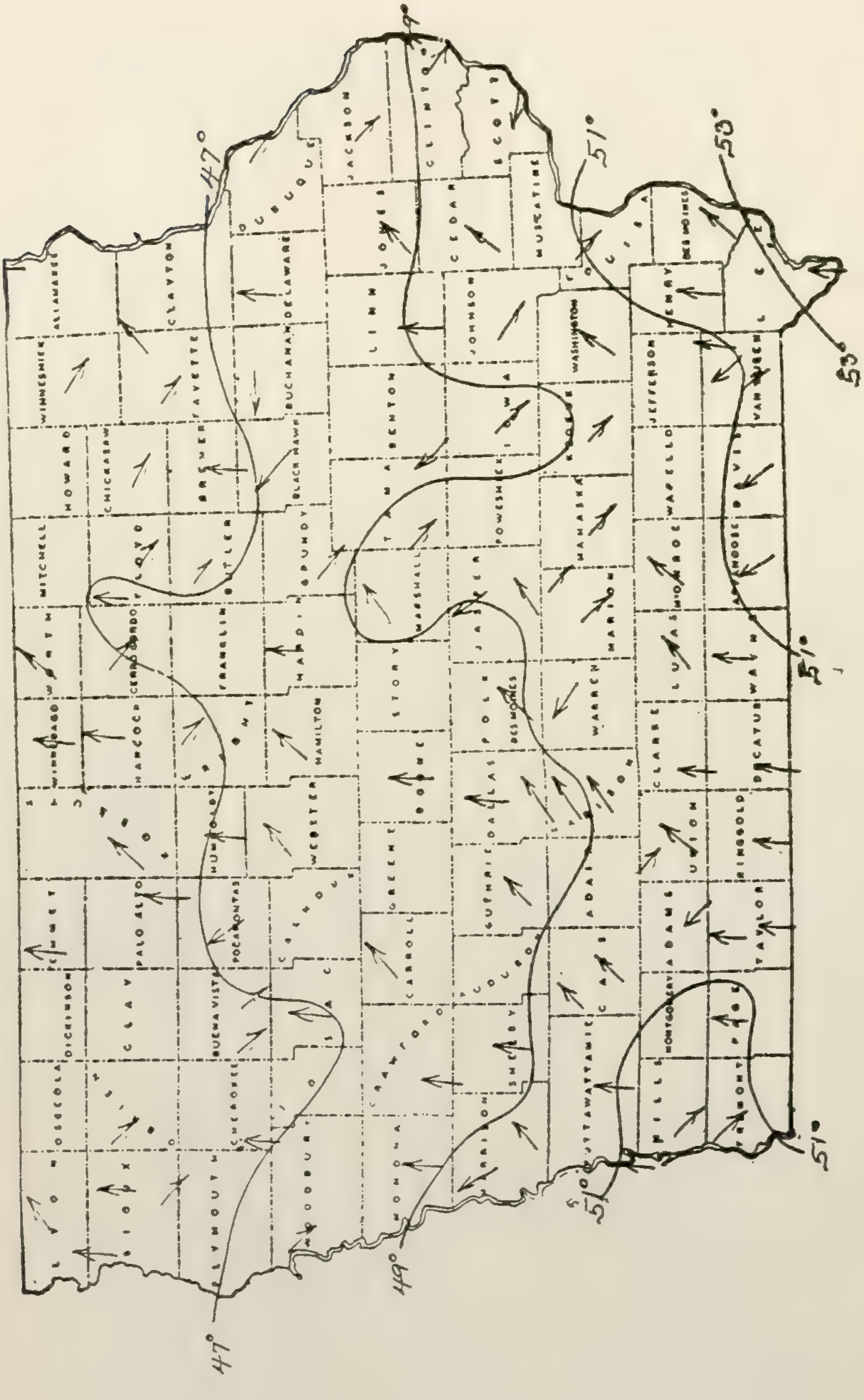
	Temperature.					Precipitation in Inches.			
Year.	Mean annual.	Highest.	Date.	Lowest.	Date.	Annual.	Greatest annual.	Least annual.	Av. snowfall.
1890	48.0	110	July 13	—27	January 22	31.30	45.74	16.00	------
1891	47.3	106	August 9	—31	February 4	32.90	49.05	23.48	------
1892	46.6	104	July 11	—38	January 19	36.58	48.77	24.78	34.2
1893	45.7	102	July* 13	—36	January 14	27.59	33.27	19.19	37.2
1894	49.7	109	July 26	—37	January 25	21.94	29.81	15.65	19.2
1895	47.2	104	May 28	—33	February 1	26.77	35.25	18.57	26.0
1896	48.6	104	July 3	—20	January 4	37.23	51.60	28.68	22.6
1897	47.8	106	July* 23	—30	January 25	26.98	36.18	20.21	38.8
1898	47.7	103	August 20	—25	December 31	31.34	55.47	19.51	40.3
1899	47.3	104	September 6	—40	February 11	28.68	42.06	21.79	23.4
1900	49.3	103	August 3	—27	February 15	35.05	47.33	25.05	25.8
1901	49.0	113	July 22	—31	December 15	24.41	37.69	16.35	38.5
1902	47.7	98	July 30	—31	January 27	43.82	58.80	20.14	28.0
1903	47.2	101	August 24	—27	December 13	35.39	50.53	26.41	19.4
1904	46.3	100	July 17	—32	January 27	28.51	38.93	19.34	29.2
1905	47.2	104	August 11	—41	February* 2	36.56	52.26	24.66	38.3
1906	48.4	102	July 21	—32	February 10	31.60	44.34	20.63	32.8
1907	47.4	102	July 5	—31	February 5	31.61	43.90	19.93	24.0
1908	49.5	101	August 3	—18	January 29	35.26	49.98	24.11	22.7
1909	47.4	103	August* 15	—26	February* 15	40.01	53.48	27.20	49.0
1910	48.6	108	July 16	—35	January 7	19.87	27.99	12.11	23.4
1911	49.5	111	July* 3	—35	January 3	31.37	46.77	19.74	35.3
1912	46.4	104	September 8	—47	January 12	28.89	33.13	15.25	39.5
1913	49.7	108	July* 16	—25	January 8	29.95	45.18	20.31	25.4
1914	49.1	109	July 12	—31	December 26	31.93	44.11	23.30	27.5
1915	47.8	99	May 14	—32	January 28	39.53	51.15	27.29	31.3
1916	47.2	106	August 4	—34	January 13	28.90	46.34	22.48	29.5
1917	44.8	106	July 30	—40	December 29	27.81	36.00	20.78	32.4
1918	49.2	113	August 4	—36	February 4	32.78	47.53	25.03	33.4
1919	48.6	104	July 30, 31	—36	December 10	36.76	48.16	26.88	26.6

*And other dates.

DATE OF KILLING FROSTS, 1919.

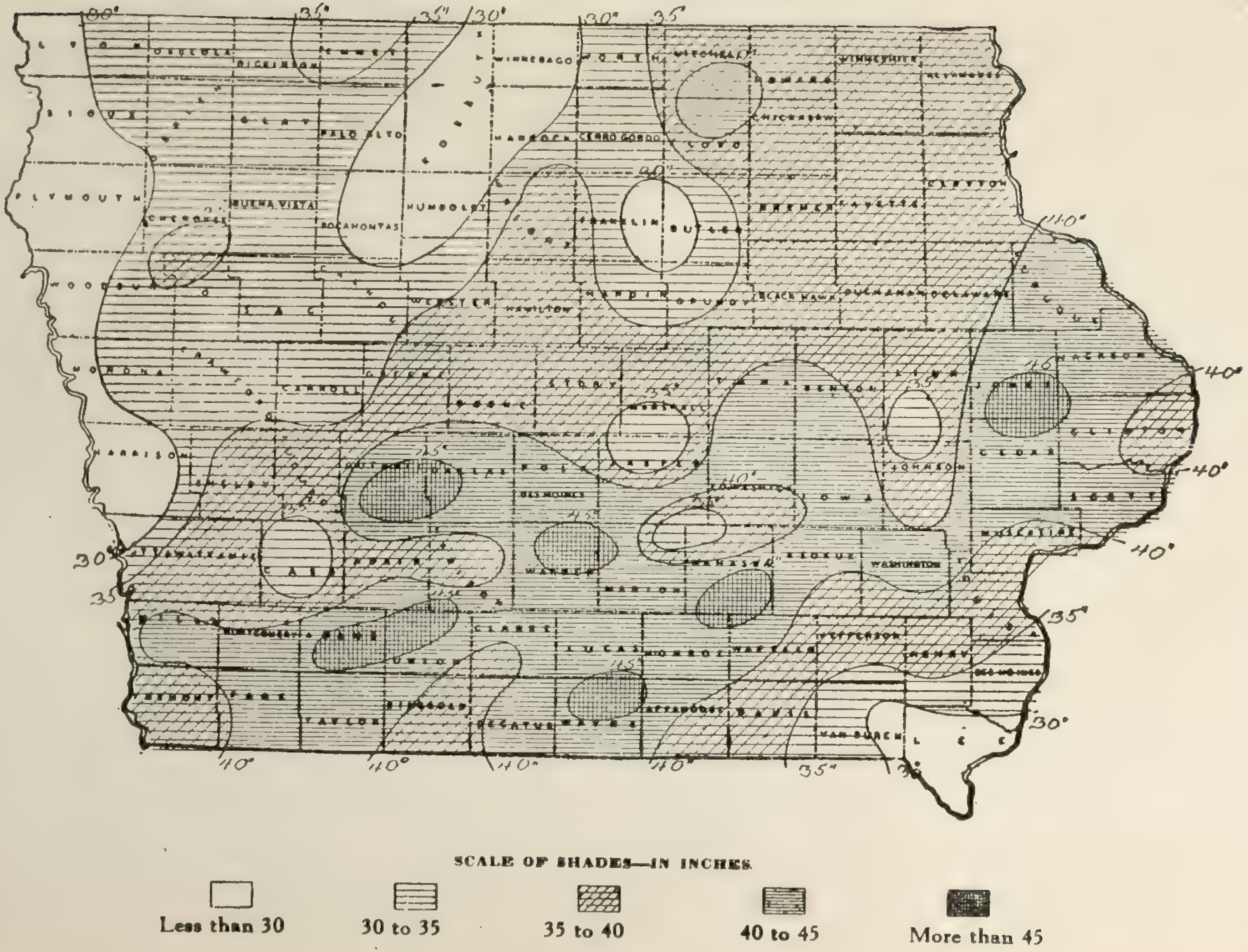
STATIONS.	Killing Frosts.		STATIONS.	Killing Frosts.		STATIONS.	Killing Frosts.	
	Last in Spring.	First in Autumn.		Last in Spring.	First in Autumn.		Last in Spring.	First in Autumn.
Northern Division—			Central Division—			Southern Division—		
Algona	Apr. 26†	Oct. 10	Ames	Apr. 27†	Oct. 11	Afton	Apr. 26†	Oct. 11†
Allison	Apr. 26†	Oct. 11	Audubon	Apr. 26†		Albia	Apr. 26†	Oct. 12
Alta	Apr. 25†	Oct. 10	Baxter	Apr. 25†	Oct. 11	Allerton	Apr. 26	Oct. 11
Alton	May 2†	Oct. 10	Belle Plaine	Apr. 26	Oct. 11	Atlantic	Apr. 26†	Oct. 10†
Belmond	Apr. 26†	Oct. 11	Boone	Apr. 26	Oct. 10	Bedford	May 2†	Oct. 11†
Britt	May 2†	Oct. 11	Carroll	Apr. 26†	Oct. 10†	Bloomfield	Apr. 26†	Oct. 11
Charles City	Apr. 28	Oct. 11	Cedar Rapids	Apr. 26	Oct. 11†	Bonaparte	Apr. 26†	Oct. 11†
Decorah	May 2†	Oct. 11	Clinton	Apr. 25†	Oct. 17	Burlington	Apr. 25†	Oct. 17
Elkader	May 2†	Oct. 11	Davenport	Apr. 25	Oct. 17	Centerville	Apr. 26†	Oct. 10†
Estherville	May 2†	Oct. 10	Delaware	Apr. 26†	Oct. 11†	Chariton	Apr. 26†	Oct. 11†
Fayette	May 2†	Oct. 11	Denison	Apr. 26†	Oct. 10†	Clarinda	Apr. 25†	Oct. 11
Forest City	May 2†	Oct. 11	Des Moines	Apr. 26	Oct. 17	Columbus Junction	Apr. 25	Oct. 11
Humboldt	May 2†	Oct. 11	Dubuque	Apr. 25†	Oct. 28	Corning	Apr. 26†	Oct. 11†
Inwood	Apr. 26†	Oct. 10†	Fort Dodge	Apr. 26†	Oct. 11†	Corydon	Apr. 26	Oct. 11†
Le Mars		Oct. 10	Grinnell		Oct. 11	Creston	Apr. 26†	Oct. 11†
Mason City	May 2†	Oct. 10	Grundy Center	Apr. 18†	Oct. 11†	Earlham	May 2†	Oct. 11
New Hampton	May 2†	Oct. 11	Guthrie Center	Apr. 26†	Oct. 11†	Fairfield	Apr. 26†	Oct. 11
Nora Springs	Apr. 26	Oct. 11	Harlan	Apr. 26†	Oct. 10†	Glenwood	Apr. 24†	Oct. 10†
Northwood	May 2†		Independence	Apr. 26†	Oct. 11†	Greenfield	Apr. 25†	
Pocahontas	May 2†	Oct. 11†	Iowa City	Apr. 26	Oct. 11	Indianola	Apr. 26†	Oct. 11
Postville	May 2†	Oct. 11†	Iowa Falls	May 2†	Oct. 11†	Keokuk	Apr. 26	Oct. 28
Rock Rapids	May 6†	Oct. 10	Jefferson	May 2†	Oct. 11	Keosauqua	Apr. 26†	Oct. 11†
Sanborn	Apr. 26†	Oct. 10†	Little Sioux	Apr. 24†	Oct. 10†	Knoxville	Apr. 26†	Oct. 11†
Sibley	Apr. 26†		Logan	Apr. 24†	Oct. 10†	Lamoni	Apr. 26†	Oct. 11†
Sioux Center	Apr. 26†	Oct. 10†	Maquoketa	Apr. 26†	Oct. 11	Lenox	Apr. 26†	Oct. 11†
Spencer	May 2†	Oct. 10†	Marshalltown	Apr. 26†	Oct. 11	Mt. Ayr	Apr. 26†	Oct. 11
Storm Lake	Apr. 25†	Oct. 10†	Monroe	Apr. 26†	Oct. 11	Mt. Pleasant	Apr. 26	Oct. 11
Washta	May 2†	Oct. 10†	Olin	Apr. 26†	Oct. 11†	Murray	Apr. 26†	Oct. 11
Waverly	Apr. 26†	Oct. 11	Onawa	Apr. 24†	Oct. 10†	Northboro	Apr. 24†	
West Bend	Apr. 26†	Oct. 10†	Perry	Apr. 26†	Oct. 11	Oakland	Apr. 25†	Oct. 10†
			Rockwell City	Apr. 26†	Oct. 11†	Oskaloosa	Apr. 26	Oct. 11
			Sac City	Apr. 26†	Oct. 10†	Ottumwa	Apr. 25†	Oct. 9†
			Sioux City	Apr. 24†	Oct. 11	Pella	Apr. 26†	Oct. 11
			Tipton	May 18†	Oct. 11†	Shenandoah	Apr. 26†	
			Toledo	Apr. 26†	Oct. 11†	Sigourney	Apr. 26	Oct. 11
			Waterloo	May 2†	Oct. 11†	Stockport	Apr. 26†	Oct. 11†
			Waukee	Apr. 26	Oct. 11	Thurman	Apr. 24†	Oct. 11†
			Webster City	May 2†	Oct. 11†	Washington	Apr. 26	Oct. 11
			Williamsburg	Apr. 26†	Oct. 11†	Winterset	Apr. 26	Oct. 11
						Omaha, Nebr.	Apr. 24†	Oct. 14

†Date of last temperature of 32° or lower in the spring, or first temperature of 32° or lower in the autumn (as the case may be) when frost was not reported.


47°
47°
49°
49°
51°
51°
51°
51°
53°
53°
WINNESHIEK
ALLAMAKEE
CLAYTON
HOWARD
CHICKASAW
FAYETTE
MITCHELL
BREMER
BUCHANAN
DELAWARE
DUBUQUE
JACKSON
CLINTON
SCOTT
CEDAR
JONES
LINN
JOHNSON
MUSCATINE
LOUISA
DES MOINES
LEE
HENRY
WASHINGTON
JEFFERSON
VAN BUREN
WAPELLO
DAVIS
KEOKUK
MAHASKA
MONROE
APPANOOSE
LUCAS
WAYNE
MARION
WARREN
CLARKE
DECATUR
UNION
RINGGOLD
ADAMS
TAYLOR
MONTGOMERY
PAGE
FREMONT
MILLS
POTTAWATTAMIE
CASS
ADAIR
MADISON
DALLAS
POLK
DES MOINES
JASPER
POWESHIEK
IOWA
BENTON
TAMA
MARSHALL
STORY
BOONE
GREENE
CARROLL
CRAWFORD
HARRISON
SHELBY
AUDUBON
GUTHRIE
MONONA
WOODBURY
IDA
SAC
CALHOUN
WEBSTER
HAMILTON
HARDIN
GRUNDY
BLACK HAWK
BUTLER
FRANKLIN
FLOYD
CERRO GORDO
WORTH
WINNEBAGO
HANCOCK
WRIGHT
HUMBOLDT
KOSSUTH
POCAHONTAS
PALO ALTO
EMMET
DICKINSON
CLAY
BUENA VISTA
CHEROKEE
PLYMOUTH
SIOUX
O'BRIEN
OSCEOLA
LYON

MEAN ISOTHERMS AND PREVAILING WINDS, YEAR 1919.

TOTAL PRECIPITATION, YEAR 1919.


30"
35"
40"
45
OSCEOLA
DICKINSON
EMMET
WINNEBAGO
WORTH
MITCHELL
HOWARD
WINNESHIEK
ALLAMAKEE
CHICKASAW
PALO ALTO
HANCOCK
CERRO GORDO
FLOYD
CLAYTON
FAYETTE
BREMER
PLYMOUTH
CHEROKEE
BUENA VISTA
POCAHONTAS
HUMBOLDT
FRANKLIN
BUTLER
WEBSTER
HAMILTON
HARDIN
GRUNDY
BLACK HAWK
BUCHANAN
DELAWARE
DUBUQUE
SAC
CARROLL
GREENE
BOONE
STORY
TAMA
BENTON
LINN
JONES
JACKSON
CLINTON
CEDAR
JOHNSON
SCOTT
MUSCATINE
HARRISON
POLK
JASPER
IOWA
DES MOINES
POTTAWATTAMIE
CASS
ADAIR
WARREN
MARION
MAHASKA
KEOKUK
WASHINGTON
MONTGOMERY
UNION
CLARKE
LUCAS
MONROE
WAPELLO
JEFFERSON
HENRY
FREMONT
PAGE
TAYLOR
RINGGOLD
DECATUR
WAYNE
APPANOOSE
DAVIS
VAN BUREN
LEE
SCALE OF SHADES—IN INCHES
Less than 30
30 to 35
35 to 40
40 to 45
More than 45

WEATHER AND CROP REVIEW

All reference in this publication to the effect of weather on crops, is the result of co-operation between the United States Weather Bureau and the Iowa Wather and Crop Service.

The mildest winter in 29 years preceded the 1919 crop season in Iowa. The mean temperature of December to March, inclusive, was 30.4 degrees, or 6.5 degrees higher than the normal and 1.4 degrees warmer than the warmest similar period heretofore (1907-8) in 29 years. Plowing was done at intervals in each of the winter months. Very little ice was harvested. The soil was saturated the previous autumn and continued unusually moist through the winter. Fruit buds swelled abnormally but all came through the winter safely except peaches which advanced so far that they were seriously injured by later freezes.

Winter wheat, which entered the winter in excellent condition, was snow-covered during periods of critical temperature, and the mild, moist winter brought it through to April 1 with a percentage condition of 101, the highest of record. Heavy snow on December 24, 1918, amounting to a foot or more in several counties, covered the wheat growing luxuriantly out of the unfrozen ground. This was thought by some to be unfavorable, but it is worth while to remember that no damage resulted. A study of winter-killing of winter wheat during the last 20 years shows that a warm, moist February, or even a cold February with ample, porous, snow covering preceding periods of severe temperature, insures the survival of the winter wheat on a large per cent of the acreage seeded.

After March 16, the soil dried rapidly and seeding made good progress till April 2, after which frequent heavy showers greatly delayed field work, not more than 5 or 6 days being suitable for field work during the month of April. More precipitation fell and more days were rainy in the period February 1 to April 30 in Iowa than in any other similar period in 30 years since State-wide records have been compiled; 9.53 inches falling on 28 days, or 3.75 inches and 9 days above the respective normals. The year 1897 has held the record heretofore with 8.63 inches and 24 rainy days. Not more than 60 per cent of the intended oats acreage had been seeded up to the close of April and much that was seeded prior to April 7 lay uncovered on the ground and thus germinated without the possibility of disking or harrowing. Considerable of the pledged and intended spring wheat acreage could not be seeded. Winter wheat stooled freely, made rank growth and was a foot high and beginning to joint in the southern counties by April 30. Pasturing and clipping with mowers was resorted to in some localities to arrest the rank growth of the wheat. Only about 40 per cent of the spring plowing was done in April and practically no corn planting. Farm work averaged 2 weeks later than normal. Deficient sunshine with temperature slightly below normal beneficially retarded the opening of fruit buds.

Rainy weather continued till May 6 when it culminated in a general downpour, followed by 8 days of good weather, but the saturated condition of the soil prevented or greatly retarded field work. By the 15th only 40 per cent of the corn had been planted, and by the 31st 95 per cent. At the close of the month 80 per cent of the corn showed rows, and cultivation was making good progress in the drier counties. The cold, cloudy, rainy weather of the first week in May prevented proper pollination of cherries and plums and greatly reduced the crop. Pastures, clover, timothy and alfalfa were in the best condition for several years, except where injured beyond recovery by drouth and grasshoppers in the southwest portion of the State last season.

Warm, humid weather, June 9-26, caught both winter and spring wheat at a very critical stage and caused an untold amount of damage. Prior to this period winter wheat promised an unprecedented yield, but this unfavorable period reduced the average yield to 17.4 bushels, perhaps half what it might have been. This is 3.2 bushels below the average of the last 10 years and the lowest yield in that period, but by no means the lowest of record and would not have been considered so disappointing if earlier indications had not raised high hopes. Spring wheat suffered worst, being not only blighted and dried up but also being seriously attacked by "scab" and other plant diseases. The greatest damage was in northwest Iowa where a large acreage was not cut, except to remove the straw so that the tame grass for which it had been a nurse crop. might have a chance to grow. Much of the spring wheat was unfit for milling and was used for chicken feed. The average yield, 9.5 bushels is, with one exception, the lowest in 30 years. In 1904 the average yield was 9.1 bushels. Oats, though getting a bad start in the spring, yielded 34.6 bushels, or only 2 bushels less than the 10-year average. The weather was ideal for harvesting.

Corn made wonderful progress after June 8. All but the late planted was laid by early in July. Dry, hot weather toward the close of July caused the corn to fire in the southwest counties and on sandy uplands in other portions of the State, but the handsome yields reported at the close of the season indicate that the abundant moisture stored in the subsoil the previous winter and spring must have come to the aid of the corn in time of need.

Haying came on early but was generally neglected for corn cultivation. The quality of the hay crop was thus somewhat reduced and the second crop of clover from which seed is ordinarily expected, gave disappointing yields, due to its late start and the dry weather of the latter part of July.

While the rainfall of August was somewhat deficient, it was pretty well distributed as to frequency and area and corn improved steadily in condition so that on September 1, the percentage condition was 96 which has not been equalled but once. Drouth prevailed in the central and southern portions of the State from August 14 to September 17, but corn seemed to draw on a reserve supply of moisture, though the less deeply rooted garden truck suffered seriously. Corn matured and dried rapidly during September till heavy rains and cooler weather occurred toward the close of the month. Light to heavy frosts with temperatures near freezing occurred in the northwest counties September 23-25, but no damage was reported.

Potatoes deteriorated rapidly after the middle of July and the September rains came too late for them to rally. The average yield, 43 bushels per acre, is among the lower records, though not the lowest. Scarcely a county in Iowa produced enough potatoes for its own use and many were shipped in.

Cloudy, rainy weather in October delayed the drying and maturing of corn so that at the close of the month very little had been cribbed. What had promised an early harvest of the corn crop developed into a late unfavorable season. November was not very favorable either, so that on December 1, 11 per cent of the corn remained in the field as compared with 9 per cent in 1918. Most of the unhusked corn is in the southern half of the State and unfortunately much of it was blown down on the ground by the windstorm of November 10 and was covered by deep snow in late November and early December. Nearly 8 per cent of the corn was "hogged down." The average price per bushel paid for husking was 8 cents.

General frosts and freezing temperature held off till October 11. Only 2 per cent of the corn, that which was late planted or replanted, was soft or immature.

The season was generally unfavorable for sugar beets. Rainy weather late in May and early in June interfered with planting, thinning and weeding the beets, so that about 2,000 acres were abandoned. Much of the remaining acreage was of necessity planted late to the smaller, more rapidly maturing varieties which reduced the tonnage produced. Deficient precipitation in the beet raising counties of the north-central portion of the State in August arrested growth. In order to get sugar into the beets it is necessary to have moderate frost followed by sunshiny days. The first frost, October 11, destroyed 75 per cent of the foliage. The cloudy, rainy days that prevailed from late September through October induced new growth instead of maturity, so there was very little chance for the development of sugar. The output of sugar was only about two-thirds that of last year, though the acreage harvested was somewhat larger.

Dry, hard soil till the rains of late September, delayed the seeding of winter wheat till an unusually late date, yet on 92 per cent of the acreage seeded the wheat made good growth and became well established; 7 per cent germinated but made very little showing above ground; and only 1 per cent did not germinate up to the beginning of winter. A generous snow covering toward the close of November preceded a glaze storm that otherwise might have proved disastrous to the wheat, and it is believed to be entering the winter in very good condition. The percentage condition reported by the U. S. Bureau of Crop Estimates on December 1 in this State was 91. Preliminary estimates of the acreage seeded in the fall of 1919 place it at 458,000 as compared with 954,000 in the fall of 1918, or about 48 per cent.

Bulletin No. 1, April 8, 1919—

The winter of 1918-19 was the mildest of the 29 winters since the Iowa Weather and Crop Service was organized and averaged 2.1 degrees warmer than the record winter of 1907-08. Heavy rains in October and November saturated the soil, and though January was deficient in precipitation, the soil continued more than usually moist till the last 10 days of March when it dried rapidly. At no time was the ground deeply frozen. Plowing was done at intervals in each of the winter months. More than the usal amount of plowing was done last fall. Seeding was about half finished in the southern tier of counties by the close of March and beginning in the central counties. The mild moist winter was exceptionally favorable for winter wheat, rye, grasses, clover and alfalfa. Very little winterkilling is reported. Peach buds were abnormally advanced by the warm weather of January and will be nearly a failure in the southern counties.

The past week was warm, averaging about 5 degrees warmer than normal, and ranging from as low as 23 in the north on the 1st to 80 in the south on the 6th. Showers were abundant and sunshine was slightly deficient. Field work progressed rapidly except in the northeast where the soil is too wet. In most sections spring wheat seeding is completed or nearing completion and the acreage will probably not quite equal that of last year. Oats seeding is advancing rapidly. Plowing for corn is beginning. All vegetation made rapid progress; grass in pastures and lawns is green. The outlook for a hay crop is promising. Winter wheat never looked better on this date.

Live stock wintered well generally, though the spring pig crop is slightly disappointing as to size and strength of litters due to effects of influenza on brood sows and to lack of supplementary feeds. The lamb crop is unusually large and fine.

As a whole, the crop outlook is highly satisfactory.

The Secretary of the State Horticultural Society reports the condition of fruit on April 1st as follows:

"Apples, 90 per cent; pears, 60; Americana plums, 94; Domestica plums, 79; Japanese plums, 69; cherries, 88; peaches, 43; grapes, 91; red raspberries, 86; black raspberries, 88; blackberries, 84; currants, 90; gooseberries, 94; strawberries, 82 per cent of perfect condition. The average for all fruits is 81 per cent, or five points above normal for April, on a 15-year average. Conditions are favorable for a good fruit crop this year from the present outlook based on the condition of the plants and fruit buds."

Bulletin No. 2, April 15, 1919—

Rainy, cloudy weather with from 15 to 30 per cent of the possible sunshine characterized the weather of the week. Light snows occurred from Monona county northward. Temperatures averaged about 6 degrees below normal in the Missouri River counties, about normal in the northeast and 2 to 5 degrees above normal in southeast. The range was from slightly below 32 to about 69.

Three or fours days of showery weather stopped field work generally, except in the southeast counties where the showers were light. Not more than half the intended acreage has been seeded to oats in the central districts and much less in the north. In many cases the oats have been sowed but there has been no opportunity to cover them. The acreage will be somewhat reduced unless favorable weather comes soon. Spring wheat and oats are up and show good stands in the south. Winter wheat made excellent progress; in fact, it is reported as too rank in several southern counties and is beginning to stem abnormally early in some localities. Meadows and pastures are starting nicely. As rough feed is scarce, pasturing has begun in some localities and will become general in about two weeks, if warm, sunshiny weather hastens growth.

While some gardening has been done, this work is being delayed beyond the usual time. Early potatoes are up in the southeast counties.

Early gathered and carefully stored seed corn is testing well, as usual, though there are about the usual number of complaints from those who failed to take due care.

Bulletin No. 3, April 22, 1919—

Cold, wet, unfavorable weather continued till about Thursday, the 17th, when it became warm and sunshiny, the soil dried rapidly and field operations were pushed Friday afternoon, Saturday and Monday after suspension for about two weeks in nearly all sections. Temperatures averaged 1 to 2 degrees below normal. Frost or freezing temperature occurred on several mornings. Sunshine was somewhat deficient. Early seeded oats are up in all parts of the state, but a large acreage remains to be seeded in the central and north portions and some even in the south. The difference of three weeks between the earliest and the latest seeded fields will probably cause wide variation in the maturity and harvest time of this crop. In many localities, where the seed lay on top of the ground, with no opportunity to disk or harrow it in, has already germinated and no further labor can be put upon it. Poor stands may result in some localities. Spring wheat is up and shows a good stand where seeded before the rains, and is showing green in some sections. The wet weather has probably reduced the acreage somewhat below that intended in the central and northern portions, as it is now too late. The condition of winter wheat, rye, grasses, pastures, meadows and fruit continues excellent. Delayed plowing will cause much late corn planting. Cherries, pears and plums are in bloom in the southern counties.

Adverse reports on the pig crop continue. Reports on colts are favorable.

Telegraphic reports, Tuesday morning, show that general rains occurred the night of the 21st-22d. This will cause further delay.

Bulletin No. 4, April 29, 1919—

Further delay in field work resulted from the general rains of Tuesday and Wednesday, 22d and 23d; Thursday, Friday and Saturday were generally fair and permitted out-door work, but rain came again Sunday and Monday. Excessive rains the morning of the 23d in Audubon, southern Carroll and eastern Shelby counties caused much damage to fields by erosion and flooding and to bridges, roads and railways. Sunshine was generally deficient, except a slight excess in the northeast counties. Temperature deficiencies averaged about 4 degrees. Freezing temperatures were general on the mornings of the 24th, 25th and 26th, and ice formed. Fruit damage was local and unimportant except in Scott county where the damage was serious. Only a small portion of the fruit buds were open in the central and northern portions and the bulk of the crop is believed to be safe. The first spraying is generally finished in the southern counties.

Early seeded oats are about 2 inches high, but are yellow in many localities, due to excessive moisture. Some oat seeding remains to be done. The unfavorable weather will turn some of intended acreage of spring wheat and oats to corn and barley. Winter wheat is 6 inches to one foot high in the southern districts, stooling generally, and showing the second joint in the extreme southeast. Spring plowing is not more than half completed and corn planting will be late. Live stock has been put on pasture about a week earlier than usual.

Bulletin No. 5, May 6, 1919—

Remarkably cloudy, cool, wet weather with rain on nearly every day in most sections and heavy downpours in some of the southern and eastern counties, made field work generally impossible, though progress was made in some northern counties where the rains were lighter and less frequent.

Deficiencies in temperature averaged 6 degrees, being the largest in the east-central portion; sunshine deficiency averaged 34 per cent, there being as little as 16 per cent of the possible amount at Davenport; and rainfall averaged 0.66 inch in excess of the normal.

Farm work is two weeks behind. On May 1st not more than 40 per cent of the customary amount of spring plowing had been done and scarcely a beginning had been made in planting corn whereas a considerable portion of the intended acreage is normally planted in the southern counties by that time. The condition of winter wheat, May 1st, was 109 per cent, and less than 1 per cent of the acreage seeded last fall will be plowed up or abandoned from any cause. The condition of spring wheat was 98, and of tame hay, 101. Frosts on the morning of May 2d, though heavy in some localities, were not generally damaging. Severe thunderstorms on the 2d-3d were attended by hail in small areas in Clay, Greene, Guthrie, Hardin, Marion, Marshall, Polk, Wayne and Winnebago counties. Crops were not far enough advanced to be damaged. Tornadoes were reported near Cornell, Clay county, and Grant City, Sac county.

Fruit spraying has been prevented by the daily rains. Early apples, plums and cherries are blooming profusely in the central counties and beginning to bloom nearly to the north line. The cloudy, cool weather is unfavorable for pollination, particularly of cherries.

The secretary of the State Horticultural Society reports the condition of fruit on May 1st as follows:

"Apples, 71 per cent; pears, 72; Americana plums 81; Domestica plums, 70; Japanese plums, 50; cherries, 83; peaches, 4; grapes, 85; red raspberries, 82; black raspberries, 84; blackberries, 85; currants, 83; gooseberries, 86; strawberries, 81 per cent of perfect condition. The average for all fruits is 72 per cent, which is 2 points above the average for May and a decline of 9 points during the month of April."

Bulletin No. 6, May 13, 1919—

Field work was resumed generally on the 9th and 10th. After a month of frequent, heavy showers, the rainy period came to a close with the general rain of May 6th. More rain has fallen and more days have been rainy since February 1st than in any other similar period in the 30 years of state-wide records in Iowa. Hailstorms occurred in Appanoose, Decatur, Johnson, Monroe, Warren, Wayne and Winneshiek counties on the 6th. In Wayne county the stones were three-fourths inch in diameter and caused slight damage. Sunshine averaged about normal being 16 per cent above normal at Dubuque and 14 per cent below normal at Sioux City. Temperatures, though higher at the beginning and ending of the week averaged 4 degrees below normal.

Corn planting became general on the 12th, wherever the ground was dry enough. The greatest progress was made in the Missouri and Big Sioux watersheds where 80 to 95 per cent of the spring plowing is done and corn planting is making rapid progress. In the lower Des Moines valley, the lowlands are under water or very wet, only the uplands have been plowed, and a bare beginning has been made in corn planting.

Small grains made good progress and their condition is excellent, except in a few localities where winter wheat is lodging on rich soil and turning yellow on saturated lowlands. The crop measures about 25 inches high in some fields in Ringgold county and is beginning to head in some counties. Rye is heading in several counties.

Fruit prospects continue good; the weather has been favorable for spraying and blooming has reached the north line.

Pastures and hay prospects were never better at this time of year. Alfalfa will be cut this month in Fremont county.

Bulletin No. 7, May 20, 1919—

Weather conditions of the past week were the most favorable of the season for farm work. Abundant sunshine and fresh winds dried the soil rapidly. Though too cool for the best growth of vegetation and for warming the soil, horses and men were able to work rapidly and put in long days.

Corn planting is 75 to 90 per cent done in the northeast counties where many farmers have finished, early corn is up, germination good, and rows showing. For the state as a whole 50 to 60 per cent of the planting is done. In the lower Des Moines valley probably not more than 40 per cent is planted and much plowing remains to be done. Showers Sunday night and

Monday forenoon relieved the baked condition of the soil resulting from the long wet period, made plowing easier, softened the clods which are unusually numerous and benefited grasses.

Winter wheat has been improved by the dry weather, the complaints of rankness, lodging and yellowness having diminished materially. Considerable heading is reported in the southern counties. Other small grains are in excellent condition. Grass would be improved by warm showers. Alfalfa is nearly ready to cut in Scott county.

Cherries and plums are dropping badly in many sections due to the heavy frosts and cloudy, wet weather the first days of May. Apple and small fruit prospects continue good.

Bulletin No. 8, May 27, 1919—

Except over the southeast and portions of the east-central and south-central districts, where the rain occurred on several days, the weather conditions for farm work during the past week were the most favorable of the season and over the greater portion of the state were carried on without interruption. Plant growth was retarded by cool conditions in southeastern, and the districts to the north and west and over much of the western and central districts by the soil being too dry and hard.

Corn planting was pushed and over much of the northern and western districts it is practically completed; over the southeastern districts it is from 60 to 75 per cent completed. The early planted corn is coming up over the entire state and a good stand is shown except where the soil is too dry for proper germination and in some very wet fields. Cultivation of corn has started over many sections and will soon be general.

The condition of winter wheat and other small grain continues good, though many winter wheat fields are too rank and some fields are showing yellow on account of too much moisture and some rust has appeared in a few isolated fields. Winter wheat and rye are starting to head in a few fields as far north as the northern counties in the central division. Pastures and meadows in general continue in excellent condition but showers would be beneficial over most of the western, central and northern portions of the state and warmer weather is necessary for plant growth.

The prospect for an apple and berry crop is encouraging, but the cherry and plum crop will not be as good as expected.

Bulletin No. 9, June 3, 1919—

Warm, sunshiny weather followed by copious rains beginning Saturday and continuing Tuesday morning made ideal conditions for field work and crop progress. Temperatures averaged 4 degrees above normal. This was the first week since April 8th with temperatures above the seasonal normal. On May 30th, 90 degrees or higher was reached at many places for the first time this season.

Rank growth of winter wheat and rye has been checked by three weeks of relatively dry weather, yet some of the rankest was lodged by heavy rains and local wind squalls. Winter wheat is well headed out in the south and beginning to head in the north. There are some reports of rust. Rye is well headed in all sections and beginning to turn slightly in places.

Less than 5 per cent of the corn crop remains to be planted; probably 80 per cent shows the rows across the fields and a good stand; cultivation has begun in all sections and in the northeast the second cultivation has begun in a few fields. Though late, the crop is rapidly catching up and ten days of warm weather would bring it up to normal. Damage from cut worms and wire worms will necessitate some replanting as usual, but the amount will be much less than last year.

Oats, spring wheat and barley are making good progress. Some alfalfa has been cut in the southwest and cutting will become general in the southern half of the state this week. The crop is the largest in years. Clover and timothy are very promising and pastures excellent.

Bulletin No. 10, June 10, 1919—

Rains continued almost daily till Saturday and set in again Monday in the western portion of the state. Temperatures averaged 4 degrees below normal, the greatest deficiency approximating 7 degrees in the west. Sunshine averaged 23 per cent below normal.

Field work was practically suspended till toward the close of the week. Corn fields in some localities are becoming grassy, particularly in the south central district where very little cultivation has been possible. The crop has not suffered seriously and a few days of dry, sunny weather would make its condition excellent.

Winter wheat is in bloom in the south and heading rapidly in the north. It has lodged considerably on rich land. Rye also has lodged slightly. Oats and spring wheat have made good growth, though the former shows yellowness from poor culture due to heavy rains at seeding time.

Alfalfa cutting has been delayed by the heavy rains and some that was cut in the southwest has been damaged as it lay on the ground.

Bulletin No. 11, June 17, 1919—

High temperatures both day and night, resembling July conditions, advanced all crops rapidly. The temperature averaged 6 degrees above normal. Sunshine averaged 6 per cent below normal, ranging from 33 per cent below at Sioux City to 15 per cent above at Keokuk. Though rains were quite general up to the 12th, after that date they were mostly light and local; and in most sections of the state corn cultivation proceeded rapidly beginning Friday or Saturday. The progress of the crop is unusually variable, ranging from not yet planted on wet bottom lands in some southern counties, to half cultivated the second time on uplands in other sections. In Madison county corn is reported to be 8 to 10 inches high, though the average for the state would be about half that height. In general the fields are rather weedy, but a few days of warm, dry weather would speedily correct this. The heavy rains drowned and eroded corn and other fields quite seriously and the plants are yellow from excessive moisture in many sections.

Winter wheat is nearly all headed out and generally in bloom; rye is filling and turning; oats are beginning to head in all but the northern counties. Spring wheat is beginning to head as far north as the central portion of the state. The winter grains have lodged considerably and there are a number of reports of red rust on winter wheat in the southern counties, but in general the condition of the crop is good.

Alfalfa cutting has been delayed 10 days by wet weather. Red clover is in bloom and ready to cut in the central and southern counties, and will be cut as soon as there is favorable weather for hay making. This work is crowding in upon the corn plowing unusually early.

A large crop of fine strawberries is being gathered,though there is some complaint of rotting, due to rains. Other small fruits promise well, but tree fruits are dropping badly and cherries and plums are a failure in some sections. Grapes are blooming freely. Potatoes are blooming and prospects are good, except a few reports of rotting where the soil is too wet.

Bulletin No. 12, June 24, 1919—

Hot weather with numerous local showers and sunshine about normal pushed corn rapidly, though unfavorable for oats. The temperature averaged 8 degrees above normal and was above 90 generally on several afternoons. In the unusual effort to clean up the weedy corn fields many horses were overcome with heat and died. The earliest corn is knee high and some will be laid by within a week. Fields are now generally clean except in a few localities in the northern part of the state where cultivation has been delayed by excessive rains. Some fields have been cultivated the third time. The progress of the crop now averages up to normal for this date. Worms, thought by some to be army worms, have been very destructive to corn, grain and particularly alfalfa, in small areas in the southern half of the state, but prompt remedial measures were taken by the farmers with the advice of county agents and the state entomologist and the worms are generally under control.

Winter wheat and rye are ripening, and harvesting will begin in a week or ten days in the southeast counties. Oats are in fair condition. The leaves of the plant show a reddish discoloration shading to a brown, dead condition at the tip. This is believed to be a disease of bacterial origin that will not cause serious reduction in yield. Though red leaf rust has attacked grains generally, the more destructive black stem rust has appeared in but few localities.

Potatoes are generally in good condition and in some localities new potatoes are large enough to use.

Bulletin No. 13, July 1, 1919—

Hot, dry weather continued in most sections until Thursday afternoon when it became much cooler, A few localities in the north and west portions were visited by excessive showers and destructive wind squalls on the 25th and 26th and a tornado in Chickasaw county on the 23d caused general damage amounting to about $60,000, but not much damage to crops. Sunshine averaged 80 per cent which is about 9 per cent above normal.

Conditions were favorable for corn which made wonderful progress and much will be "laid by" by the 5th. Fields are generally clean. The tallest is waist high. The hot period of 18 days, June 9th to 26th, with high humidity during the first half of the period, has been very unfavorable for small grains. Scab, smut, leaf rust, blight and in a few localities, black stem rust, flourished. The yield and quality of the small grains have thus been greatly reduced. Harvest of winter wheat and rye has begun as far north as the central counties and is nearly completed in a few counties of the southern tier.

Damage to alfalfa, grass and small grain by army worms and variegated cutworms has been great in limited areas, but they have about run their course and are entering the ground.

An unusually heavy crop of timothy and clover hay is being harvested. Pastures are in excellent condition. Early potatoes are a good crop and are being used, but late potatoes are showing the effects of the dry, hot weather and are badly needing rain in the southwest counties.

Bulletin No. 14, July 8, 1919—

Seasonable weather during the past week advanced corn rapidly and the bulk of the crop is laid by with the fields fairly clean. Winter wheat, rye and hay harvest progressed rapidly. Though winter wheat was unusually promising from December to early June, the hot weather of the past month has caused serious deterioration through blight and scab. Not more than half of the kernels in the heads are plump and well filled. Though this is partly offset by the large number and size of the shocks, the yield per acre will scarcely be up to normal. The few early thrashing reports are disappointing. Spring wheat is similarly affected, and oats are blighting badly. Early oats harvest will begin this week. Showers that covered most of the state on the 4th and 5th were beneficial to corn, truck crops and pastures and did not cause serious delay or damage in haying and harvest.

The condition of the berry crop has improved slightly during the month and the percentage on red and black raspberries is the highest reported for July 1st in the last 20 years.

Bulletin No. 15, July 15, 1919—

Rains covered all portions of the state during the week and were generally beneficial except where excessive downpours occurred. These were mostly in the northwest, south-central and east-central portions, but also in limited areas in other portions. The most intense rainstorm in 45 years occurred at Dubuque on the 9th, causing seven deaths and $100,000 damage.

Harvest was delayed in the areas of heavy rain. Winter wheat, early oats, rye and barley harvest are about completed. Spring wheat and late oats harvest is beginning. Haying has progressed rapidly. The second crop of alfalfa is being cut in the southwest. Threshing is beginning north to the central counties. Winter wheat yields of 15 to 18 bushels are reported, testing 58 pounds per bushel. Many fields of spring wheat are not worth cutting, due mostly to scab and blight. Corn made excellent progress; it is beginning to tassel in all sections and is somewhat in advance of the normal development, particularly in the northern counties. Truck and potatoes which have suffered from drouth, were greatly benefited by the rains of the week.

Bulletin No. 16, July 22, 1919—

Corn averages well along in its most critical period—the tasseling and silking period, though unusually variable in its development in some sections. With normal temperature and rainfall during the next 20 days this crop will be practically assured. It would be benefited by rain now in all sections, particularly in the central and southern counties.

Early thrashing returns show winter wheat yields of 10 to 35 bushels per acre, weighing 57 to 58 pounds per bushel. The average yield will not be far from that of the last 10 years. Spring wheat ranges from a considerable acreage not worth harvesting to possibly 15 or 20 bushels per acre, averaging not more than half of the 16-bushel normal on the acreage seeded. This crop is the poorest in the western counties, which have heretofore been the heaviest wheat producers in the state. Oats are light in yield and quality and the average will be considerably under that of the last 10 years which is 37 bushels.

Excellent weather for haying has resulted in a large crop of excellent quality. Second crop alfalfa is being cut and shows good yields. The quality is much superior to that of the first crop due to better weather for curing. More than the usual acreage of timothy is being cut or reserved for seed and a large crop is expected.

Potatoes, both early and late have suffered seriously from lack of rain: also garden truck.

Bulletin No. 17, July 29, 1919—

The hot, dry weather of the past week was ideal for finishing the harvest, curing grain in the shock, thrashing and stacking. Temperatures were near or above 100 degrees at many stations, 26th-28th. The mean temperature for the state, 82 degrees, is the highest of the season and 7 degrees above normal. Thrashing of winter wheat goes very slowly on account of the excess of straw. Early thrashing reports indicate that the yield will be about normal, but the quality is not very good. Spring wheat returns continue poor; oats light weight and less than normal yield. Corn is beginning to need rain in all sections, but in spite of the drouth which has prevailed in most sections of the state for the last two weeks, the corn appears to be holding its own remarkably well. The hot strong winds of the 25th, 26th and 27th caused the corn to curl in some localities, but there are very few reports of firing. It is problematical what the effects of the heat will be on pollenization. Such weather conditions tend to scorch the silk and render it unreceptive to the pollen and also to kill the pollen. At this time there is nothing to indicate that the yield will be reduced below the normal, though it is quite certain that a "bumper crop" cannot be expected. Local showers that covered a small portion of the state Sunday afternoon and night will be of great benefit. Pastures and truck crops are seriously needing rain over most of the state.

Bulletin No. 18, Aug 5, 1919—

Much needed rains fell in all portions of the state during the week These with much cooler weather on the 1st and 2d afforded corn an opportunity to recover from the scorching of the previous two weeks which had become serious in about one-third of the state. Upland corn in some sections was too far gone to recover. Late planted lowland corn also suffered, mainly due to the poor resistant conditions of the soil resulting from saturation for a long period earlier in the season.

Hundreds of reports from township crop reporters show the average condition of corn on August 1st to be 93 per cent or 5 per cent better than the average of the last 10 years. The best corn is in the Mississippi river counties from Scott northward, where the condition ranges from 100 to 106 per cent. Similar conditions prevail in Fayette, Bremer, Mitchell, Mahaska, Sioux, Ida, Crawford, Shelby, Cass and Guthrie counties. In Blackhawk, Monroe and Kossuth the condition is less than 80 per cent.

Pastures averaged 95 per cent, or 11 per cent better than the 10-year average; potatoes 72, or 8 per cent poorer than the 10-year average.

Winter wheat yields, from 435 reports, average 18.5 bushels per acre, or 2.4 bushels below the 10-year average and considerably under standard weight; spring wheat, 445 reports, 10.2 bushels or 5.7 below the 10-year average, and of such poor quality that much cannot be milled; early oats, 523 reports, 33.3 bushels and 3.3 below the normal; late oats, 466 reports, 33 bushels; barley, 255 reports, 24.9 bushels; rye, 209 reports, 16 bushels; tame hay, 582 reports, 1.8 tons; wild hay, 1.4 tons.

The secretary of the State Horticultural Society reports the condition of fruit on August 1st as follows:

Summer apples, 55 per cent; fall apples, 44; winter apples, 27; pears, 17; Americana plums, 15; Domestica plums, 13; Japanese plums, 9; grapes, 80 per cent of a full crop. The average of all fruits is 32.5 per cent. The average of apples for the last 10 years is 46 per cent which is 4 per cent higher than the crop this year. The failure of the Americana plums has reduced the general average of fruits this year 25 per cent below the average of the last ten years on this crop. Grapes are more promising, being 13 per cent above the 10-year average of this crop. Apples in commercial orchards that have been sprayed, will be a fair crop of good quality, while those from farm orchards that have not been cared for will be poor and scarcely marketable on account of scab and worm injury.

Bulletin No. 19, August 12, 1919—

Good rains in nearly all portions of the state improved the condition of corn and pastures, but delayed thrashing and slightly injured shocked grain where the wind blew the caps off the shocks. In some of the southwest counties corn has fired seriously and the rain came too late to fully restore it, but only a small per cent of the total area of the state was thus affected. The crop is unusually variable in development, ranging from that which is just beginning to shoot to that which is well past the roasting ear stage and beginning to dent. Generally the ears have filled well, are heavy and beginning to hang down. In many localities it is believed the soil moisture is sufficient to insure the crop without further rain, but normal rainfall during the remainder of August would no doubt be beneficial. In Chickasaw county it is reported that the crop will be safe from frost on September 1st.

Thrashing is about two-thirds done in the southern and one-third done in the northern counties. The later thrashing returns are not reassuring.

The rains put the soil in good condition for plowing which was begun in many sections preparatory to seeding winter wheat.

The hot, dry summer seems to have injured potatoes beyond recovery, though some remarkable recoveries late in the season are on record and it is too soon to pronounce this crop a failure.

Considerable damage from hail and wind is reported in Clayton county.

Bulletin No. 20, August 19, 1919—

Good rains with moderate temperature and abundant sunshine were favorable for all growing crops. Corn made excellent progress. The ears are filling well, much has reached the denting stage, and the husks are beginning to dry. Some is already fit to gather for seed. Indications are that the yield will be above normal.

Thrashing has progressed rapidly in spite of occasional delay by rain. In some localities thrashing is completed.

A fine third crop of alfalfa is being harvested. The yield and quality is as good as the second crop.

Fall plowing has made good progress, the rains having put the soil in good condition for this work.

Preparation of the ground for winter wheat is well along in some sections. The indications are that the acreage seeded to this crop will be considerably reduced.

Bulletin No. 21, August 26, 1919—

Rain was generally deficient, except in Winneshiek, Scott and adjoining counties and in a few central and south-central counties, where moderate rains occurred. Many of the northwest, west-central and east-central counties had no rain. Temperatures averaged about normal and ranged from about 90 on the afternoons of the 21st and 22d to well down in the 50's on several nights. Sunshine averaged 5 per cent above normal, being much above normal in the Mississippi river counties and somewhat below normal in the western part of the state.

Corn continued to make good progress and is maturing rapidly in most sections. New corn is being fed to hogs in some localities and "hogging down" is about to begin. Silo filling will begin in some of the northern counties within a week. The crop is generally earlier than normal and with favorable weather the bulk of it will soon be safe from frost. Old corn is being marketed briskly in some sections, which is a possible indication of confidence in the new crop.

Shock threshing is nearly finished, but considerable stack threshing remains to be done. A considerable acreage of spring wheat in the western counties that was not cut at harvest time has since been cut and removed from the land so that the tame grasses seeded therewith can grow. In many cases this wheat has been threshed and the yields realized were sufficient to cover the expense of harvesting and threshing.

Fall plowing is progressing where moisture is sufficient, and even in dry, hard soil, where tractors are available, but the dry soil is breaking up in hard clods.

Preparation for seeding winter wheat has been delayed by dry soil over most of the heavier winter wheat producing counties. Reports of decrease in the intended acreage of this crop are numerous.

Potatoes are regarded as a failure in many sections of the state. Pastures and truck crops are needing rain.

Sugar beets are affected by rust in Wright county. The plum crop is poor. Apples in sprayed orchards are yielding well.

Bulletin No. 22, September 2, 1919—

Dry, cool weather prevailed with night temperatures low in the 40's. Light frost was reported in the lowlands near Pocahontas on the morning of August 31st, and a minimum temperature of 38 at Inwood during the night of the 29th-30th. The mean temperature for the state, 66 degrees, is 3 degrees below normal. This is the first week since the week ending June 10th, with the mean temperature below normal. Scattered showers occured in the southwest and extreme northeast and north portions, but less than half the area of the state received rain.

Corn is maturing rapidly but more rain and higher temperature during the last two weeks would have increased the yield. Silo filling is about to begin in many localities.

Pastures have failed in many sections due to dry weather and live stock is being fed green corn fodder and hay. Considerable hog cholera is reported.

Third crop alfalfa is yielding well and being put up in fine condition. Threshing made good progress.

Potatoes continued to deteriorate, due to dry weather, and unless rain comes soon much of the acreage will be practically a total failure.

Sorghum is ripe and ready to cut well in advance of probable frost.

The soil is so dry that fall plowing has been possible only by the use of tractors in most districts this week.

Preparation for seeding winter wheat is almost at a standstill due to dry soil, though seeding will begin soon in Scott county. A decided decrease in the acreage seeded is now indicated.

Bulletin No. 23, Sept. 9, 1919—

Hot and mostly dry weather with strong southerly winds hastened the corn toward maturity, but injured pastures, potatoes, tomatoes, sweet corn and minor truck crops. Temperatures in the 90's were general on several afternoons, particularly Monday, the highest being 97 at Burlington.

Reports from township correspondents, September 1st, show the average condition of corn to be 96 per cent, which is 12 per cent above the 10-year average. In 1912, when the largest crop of record, 45.8 bushels, was raised, the percentage condition on September 1st was only 95, but this was due to the fact that the crop was late; and only 66 per cent escaped serious frost injury. This year our correspondents estimate that 70 per cent of the crop will be safe if killing frost holds off till September 20th; 84 per cent October 1st, and 95 per cent, October 15th. It is believed that the yield will be about 42 bushels per acre, an unusually large percentage of which will be sound and marketable, with normal weather. Reports indicate that Iowa will easily head the list of corn-producing states this year. Silo filling is progressing rapidly in the central and northern portions and some corn has been cut for fodder.

Up to September 1st the average of all reported yields of winter wheat was 18 bushels; spring wheat, 10; oats, 34; barley, 25; rye, 15; timothy seed, 4.6.

Eighty-nine per cent of the threshing was done on September 1st, which is 17 per cent more than normal. Much of the grain is being stored on the farms, as cars are not available in which to ship it. The condition of pastures is 90 per cent, or about 5 per cent above normal; potatoes, 60 per cent or 10 per cent below normal.

Except in the northwest part of the state where showers were sufficient to moisten the ground to the necessary depth, fall plowing and preparation for winter wheat seeding have made little or no progress. Unless rain comes soon, seeding will be delayed beyond the usual time. Reports continue to indicate a large reduction in the acreage of both fall wheat and rye.

Canning factories began operations generally during the last 10 days. Sweet corn yield is being reduced by hot, dry winds. The corn ear worm is less troublesome this year. Tomatoes are considerably less than a normal crop, due to drouth.

Sorghum cutting is in progress, but not much grinding has been done. The acreage is less than last year. The acreage of buckwheat is believed to have been reduced also. Turnips are generally a failure.

Considerable second crop clover is being cut for seed, but the yield is generally disappointing and in many cases not as large as from the first cutting.

Bulletin No. 24, Sept. 16, 1919—

The week opened hot in the south and central districts with temperatures above 95 degrees on the 9th at many stations. Lower temperatures followed, reaching low in the 40's on the morning of the 12th, with light frost on the lowlands in the vicinity of Grundy Center and Iowa Falls. Drouth continued, except heavy rains in the northeast counties Tuesday afternoon and night and light showers through the week in the northwest. The drouth is becoming serious in the central and southern districts. In the south-central counties, wells are failing, stock water is scarce and pastures are dried up.

Corn has dried rapidly. Silo filling and fodder shocking are nearing completion in the north. Late corn that did not reach the denting stage before the drouth set in three weeks ago, has deteriorated appreciably. Considerable corn that was reported in good condition has matured and dried too rapidly so that it will be loose on the cob.

Potatoes have suffered greatly from drouth and large quantities will have to be shipped into the state. Some counties that normally produce a large export crop will not have enough for home use.

Winter wheat seeding and fall plowing have been almost impossible in the southern two-thirds of the state due to the hard, dry condition of the soil.

Spring seeding of timothy and clover and fall seeding of alfalfa are seriously needing rain. Reports on the yield of clover seed from the second cutting continue favorable. The yield of hay from the second cutting of clover and the third cutting of alfalfa has been somewhat reduced by the drouth.

Considerable numbers of cattle and sheep are being shipped into the state to consume the large corn crop, though feeders are hesitating somewhat. Less than the usual number of sows will be bred this fall. The tendency is toward reduced production in all agricultural lines as a reaction from the strenuous efforts in war-time production.

Bulletin No. 25, Sept. 23, 1919—

Copious rains on several days relieved the long drouth in the central and south portions of the state. The average precipitation this week was the heaviest of the season. Over a belt extending from southwest to northeast across the state it amounted to from four to more than six inches. In the extreme northwest the amounts were small. The rain came gently and steadily and soaked the soil to an unusual depth. Very little ran off into the streams.

Fall plowing and winter wheat seeding which have awaited the rains are being rushed. Though late, considerable winter wheat and rye will yet be seeded. The acreage will be much less than last year.

Silo filling and fodder cutting are nearing completion in the north and west portions of the state and are making good progress elsewhere, though somewhat delayed by rainy weather.

The earlier planted corn, comprising 75 per cent of the crop, is now safe from frost. Many fields had dried, before the rain came, till they had the appearance of being killed by frost. Much seed corn of excellent quality was saved this week.

Temperatures ranged from slightly above 90 at a few stations on the afternoon of the 16th and 19th to 36 with light frost at Inwood in the extreme northwest on the morning of the 22d.

Potatoes are being dug in the north, but late varieties are still growing in some counties and it is believed that the recent rains may benefit them slightly. The crop is generally poor. Shipments into several towns are selling for $2 per bushel or slightly above.

Pastures, young and newly seeded grasses, alfalfa and truck crops were greatly benefited by the rains and warm weather. The corn ear worm is reported as serious on both sweet and field corn in Pottawattamie county.

The apple crop amounts to practically nothing except in sprayed orchards which are yielding a fair crop. Grapes are plentiful and of good quality. Sorghum making is progressing rapidly.

Bulletin No. 26, Sept. 30, 1919—

Good rains beginning Saturday night, 27th, in the southwest and central portions of the state and extending over the rest of the state up to Tuesday morning, have greatly benefited pastures, put the soil in good condition for fall plowing and permitted winter wheat seeding which is being pushed rapidly, though late. The acreage will probably be reduced to a pre-war basis.

Corn matured and dried rapidly during the dry weather that prevailed up to Saturday. Husking of the early varieties has already begun in the northern half of the state. Cribbing will become general by October 10th-15th, which is considerably earlier than usual. Light frost occurred in several northwest counties from the 22d to 25th, and heavy frost on the 25th nipped the corn leaves and killed tender garden truck in the extreme northwest.

Canning factories are drawing their operations to a close. The corn ear worm became so serious toward the close of the season that the cost of production was greatly increased.

Commercial apples of the earlier varieties are being harvested in the southwest counties. The vineyards of Pottawattamie county have produced well and a crop of excellent quality has been gathered.

The honey crop is good and the demand strong.

As a whole the crop season has been very favorable. Temperatures were generally above normal, but without extremes of heat. Rainfall, though not ideally distributed as to time and place has evidently been generally satisfactory to King Corn, who has prospered greatly, but as usual his prosperity has been somewhat at the expense of the small grains and potatoes. Spring wheat and potatoes are poor crops. The hay crop is excellent. Fruit, where well cared for, has given good returns.

CROP SEASON WEATHER, 1919, BY WEEKS.

Total rainfall, mean temperature and mean sunshine with departures from the normal.

Week ending	Rainfall (Inches)		Temperature (Deg. Fahr.)		Sunshine	
	Total	Departure	Mean	Departure	Percent	Departure
April 29	0.8	0.0	49	—5	--	--
May 6	1.7	+0.7	51	—6	28	—34
May 13	0.4	—0.6	54	—4	63	0
May 20	0.6	—0.5	58	—3	69	+7
May 27	0.2	—0.7	60	—3	55	—7
June 3	2.1	+1.1	69	+4	60	—6
June 10	2.1	+1.1	64	—4	44	—23
June 17	0.9	—0.3	77	+6	63	—6
June 24	0.7	—0.4	78	+8	61	—7
July 1	0.2	—0.9	74	+1	80	+9
July 8	0.7	—0.2	77	+3	78	+4
July 15	1.6	+0.7	78	+3	68	—6
July 22	0.0	—0.8	74	0	92	+18
July 29	0.1	—0.8	82	+7	89	+15
August 5	1.1	+0.2	78	+4	78	+6
August 12	0.8	0.0	74	0	74	+2
August 19	0.8	0.0	73	0	81	+10
August 26	0.2	—0.5	72	+1	76	+5
September 2	0.1	—0.6	66	—3	81	+13
September 9	0.2	—0.5	75	+8	73	+10
September 16	0.4	—0.4	69	+4	72	+9
September 23	3.1	+2.3	67	+4	55	—7
September 30	1.6	+0.9	62	+2	67	+5

+, excess; —, deficiency.

IOWA CROP REPORT, MAY 1, 1919.

Reports to the Iowa Weather and Crop Service from township correspondents shows the condition of winter wheat to be 109 per cent, and less than 1 per cent of the acreage seeded last fall will be plowed up or abandoned for any cause; spring wheat, 98; tame hay, 101. Practically no corn planting and only about 40 per cent of the spring plowing had been done. Farm work was about 2 weeks later than normal.

IOWA CROP REPORT, JUNE 1, 1919.

Following is a summary showing the percentage condition of crops on June 1.

Corn, 95 per cent; oats, 98; spring wheat, 99; winter wheat, 107; barley, 98; rye, 101; flax, 98; potatoes, 97; tame hay, 102; wild hay, 100; pastures, 105; alfalfa, 102; sweet corn, 97; pop corn, 96 per cent.

On May 15 only 40 per cent of the corn planting was done for the State as a whole. In the drier counties, Shelby, Calhoun and Pocahontas, 70 per cent, or more had been completed, while from Jackson southwest to Washington, thence westward to Union Counties only 5 to 20 per cent was planted. Heavy rains on the 19th further retarded field work in the southern division so that only 80 per cent of the corn planting had been done up to the close of the month in Lucas county, but in Black Hawk, Calhoun, Humboldt, Fremont and Page counties planting was finished, and for the State as a whole 95 per cent was done on June 1.

The secretary of the State Horticultural Society reports the condition of fruit on June 1 as follows: "Apples, 66 per cent; pears, 45; Americana plums, 49; Domestica plums, 44; Japanese plums, 34; cherries, 54; peaches, 3; grapes, 82; red raspberries, 84; black raspberries, 85; blackberries, 82; currants, 72; gooseberries, 78; strawberries, 90 per cent of a full crop. The average for all fruits is 62, a decline of 10 points since May 1."

IOWA CROP REPORT, JULY 1, 1919.

Reports from township correspondents showed the following average condition of crops on July 1: Corn, 94 per cent; oats, 92; spring wheat, 90; winter wheat, 91; barley, 93; rye, 95; flax, 90; potatoes, 94; tame hay, 103; wild hay, 100; pastures, 106; alfalfa, 101; sweet corn, 96; pop corn, 96 per cent. The decline in winter wheat since June 1 is 16 per cent, yet it is about the 10-year average. Spring wheat is 4 per cent below the 10-year average. Corn is 2 per cent above the 10-year average. The condition of tame hay is 3 per cent higher than before reported in the last 10 years.

Delay on the part of the township assessors in making their returns of the acreage of the various crops in 1918, makes it impossible to complete the acreage estimates of the Iowa Weather and Crop Service for the crops of 1919, in time for publication in this issue, but they will appear in the July report.

The secretary of the state horticultural society reports the condition of fruit on July 1 as follows: "Summer apples, 54 per cent; fall apples, 50; winter apples, 40; pears, 16; Americana plums, 24; Domestica plums, 18; Japanese plums, 17; cherries, 58; grapes, 85; red raspberries, 90; black raspberries, 91; blackberries, 83; currants, 73; gooseberries, 80 per cent of a full crop. The average for all fruit is 47 per cent or one point below the ten-year average for July, but is 15 points below that of last month, the decline being caused by the heavy drop of apples, pears and plums. The condition of the berry crop has improved slightly during the month and the percentage on red and black raspberries is the highest reported for July 1 in the last 20 years."

IOWA CROP REPORT, AUGUST 1, 1919.

The condition of crops on August 1 was as follows: Corn, 93 per cent, or 5 per cent better than the average of the last 10 years; pastures, 95 per cent, or 11 per cent better than the 10-year average; potatoes, 72, or 8 per cent poorer than the 10-year average.

Early thrashing reports, mainly from the central and southern parts of the State, show the average yield of winter wheat to be 18.5 bushels per acre, or 2.4 bushels below the 10-year average and considerably under standard weight; spring wheat, 10.2 bushels, or 5.7 bushels below the 10-year average and of such poor quality that much can not be milled; early oats, 33.3 bushels, or 3.3 bushels below normal; late oats, 33.0 bushels; barley, 24.9 bushels; rye, 16.0 bushels.

The yield of tame hay is reported as 1.8 tons per acre; wild hay, 1.4 tons.

The secretary of the State Horticultural Society reports the condition of fruit on August 1 as follows:

Summer apples, 55 per cent; fall apples, 44; winter apples, 27; pears, 17; Americana plums, 15; Domestica plums, 13; Japanese plums, 9; grapes, 80 per cent of a full crop. The average of all fruits is 32.5 per cent. The average of apples for the last 10 years is 46 per cent which is 4 per cent higher than the crop of this year. The failure of the Americana plums has reduced the general average of fruits this year 25 per cent below the average of the last 10 years on this crop. Grapes are more promising, being 13 per cent above the 10-year average of this crop. Apples in commercial orchards that have been sprayed, will be a fair crop of good quality, while those from farm orchards that have not been cared for will be poor and scarcely marketable on account of scab and worm injury.

IOWA CROP REPORT, SEPTEMBER 1, 1919.

Reports from township correspondents, September 1, show the average condition of corn to be 96 per cent, which is 12 per cent above the 10-year average. It is believed that the yield will be about 42 bushels per acre, which would mean a crop of about 416,000,000 bushels, an unusually large percentage of which will be sound and marketable, with normal weather. Iowa will easily head the list of corn-producing states this year.

Up to September 1 the average of all reported yields of winter wheat was 18 bushels; spring wheat, 10; oats, 34; barley, 25; rye, 15; timothy seed, 4.6. Eighty-nine per cent of the threshing had been done up to September 1 which is 17 per cent more than normal. Much of the grain is being stored on the farm, as cars are not available in which to ship it. The condition of pastures is 90 per cent, or about 5 per cent above normal; potatoes, 60 per cent or 10 per cent below normal.

FINAL CROP REPORT OF THE STATE, 1919.

Beginning with this, the final crop report for 1919, the Iowa Weather and Crop Service as a State organization and the U. S. Bureau of Crop Estimates as a Federal organization working in Iowa, have combined all data to make one harmonized report of acreage and yield. This has necessitated a revision of the county and total acreages of some of the crops published by the Iowa Weather and Crop Service earlier in the season. For this reason comparisons with previous years' acreages of the various crops is impracticable this year. The prices here quoted were compiled by the Iowa Weather and Crop Service independently. This report does not include or take into consideration live stock, poultry or dairy products.

Corn.—The estimated acreage was 10,000,000; average yield, 41.6 bushels per acre; total yield, 416,622,000 bushels; average price, $1.17 per bushel; total value, $487,447,000. Only 2 per cent of the crop was reported to be soft or immature and 89 per cent had been husked on December 1. The total bushels of sound corn in Iowa this year are the greatest of record. The quality is generally excellent.

Oats.—The estimated area harvested was 5,670,000 acres. Average yield, 34.6 bushels; total yield, 196,391,500 bushels; average price, 64 cents; total value, $125,690,560.

Spring Wheat.—Area harvested, 750,000 acres; average yield, 9.5 bushels per acre; total yield, 7,145,300 bushels; price per bushel, $1.89; total value, $13,504,617.

Winter Wheat.—Area harvested, 950,000 acres; average yield per acre, 17.4 bushels; total yield, 16,508,000; average price, $1.98 per bushel; total value, $32,687,028.

Barley.—Area harvested, 315,000 acres; average yield per acre, 25.5 bushels; total yield, 8,022,800 bushels; average price, $1.11 per bushel; total value, $8,905,308.

Rye.—Area harvested, 70,000 acres; average yield, 15.9 bushels; total yield, 1,110,050; price per bushel, $1.33; total value, $1,476,366.

Flax Seed.—Average yield, 9.5 bushels; total yield, 152,275 bushels; total value at $3.90 per bushel, $593,872.

Timothy Seed.—Area harvested, 200,000 acres; average yield, 4.5 bushels; total yield, 900,000 bushels; total value, at $4.91 per bushel, $4,419,000.

Clover Seed.—Area harvested, 60,000 acres; average yield, 1.4 bushels; total value at $24.92 per bushel, $2,093,280.

Potatoes.—Area harvested, 115,000 acres; average yield, 43 bushels; total yield, 4,942,110 bushels; average price, 1.94; total value, $9,587,693.

Hay (Tame).—Average yield, 1.6 tons per acre; total yield, 4,957,370 tons; average price, $18.37 per ton; total value, $91,066,887.

Hay (Wild).—Average yield, 1.3 tons; total yield, 631,693 tons; average price, $16.48; total value, $10,410,301.

Alfalfa.—Area harvested, 148,000 acres; average yield, 3.2 tons; total yield, 477,314 tons; average price, $23.09 per ton; total value, $11,021,180.

IOWA CROPS, 1919, ESTIMATED NUMBER OF ACRES BY COUNTIES.

	Corn	Oats	Spring Wheat	Winter Wheat	Barley	Rye	Flax	Potatoes	Tame Hay	Wild Hay	Alfalfa	Pastures
Adair	117,100	42,600	10,000	14,200	5,020	140	------	810	20,800	1,670	110	121,800
Adams	77,300	26,900	4,700	21,900	1,320	150	------	500	20,100	1,770	420	101,100
Allamakee	43,000	40,000	7,300	1,200	6,200	500	50	1,270	52,700	1,230	20	179,100
Appanoose	50,000	25,500	2,800	17,600	30	800	------	350	41,300	840	50	131,700
Audubon	119,000	88,800	8,800	4,200	8,000	20	------	820	22,200	1,490	1,200	84,800
Benton	143,100	94,100	6,200	1,800	7,440	1,110	------	1,030	39,400	2,030	110	119,100
Black Hawk	105,500	70,500	3,600	1,000	5,490	3,300	20	1,620	22,600	8,020	60	95,000
Boone	131,100	78,400	5,000	2,100	1,170	80	100	450	26,800	7,270	300	85,600
Bremer	65,700	53,400	3,800	200	1,980	1,100	20	1,470	20,200	20,360	70	79,000
Buchanan	100,300	70,600	4,500	200	4,760	1,540	10	1,070	28,800	12,000	40	115,700
Buena Vista	125,400	95,100	2,800	300	1,050	410	60	1,130	22,900	7,160	700	78,100
Butler	103,300	81,800	3,800	50	1,730	1,230	10	1,520	27,400	10,600	20	92,000
Calhoun	146,200	101,200	2,100	600	810	70	20	540	20,900	3,090	260	56,600
Carroll	117,100	66,400	10,800	2,700	2,160	30	------	1,840	30,500	6,480	360	83,100
Cass	126,700	43,700	13,500	27,200	9,520	860	------	970	24,800	890	600	104,300
Cedar	108,900	40,500	4,600	8,100	10,300	670	------	860	45,700	130	110	107,800
Cerro Gordo	88,800	76,800	6,100	50	3,540	100	200	1,420	30,500	8,300	140	84,200
Cherokee	128,600	83,800	1,400	300	2,400	50	10	1,190	27,000	7,900	2,730	84,700
Chickasaw	63,000	61,000	6,600	50	2,820	510	850	1,350	33,000	13,400	------	90,500
Clarke	60,400	23,200	1,800	19,800	160	170	------	220	28,700	80	120	113,100
Clay	111,300	83,400	1,400	200	1,750	150	380	910	23,500	11,400	520	77,800
Clayton	74,400	62,400	8,400	2,000	9,800	680	------	2,040	66,700	1,150	60	184,700
Clinton	110,200	48,300	8,500	5,300	10,280	2,090	------	950	55,800	1,450	120	160,400
Crawford	140,400	64,500	31,300	1,600	3,140	220	------	1,530	46,100	4,940	5,100	122,200
Dallas	126,000	60,200	5,500	28,600	820	200	------	370	20,800	1,900	600	91,300
Davis	59,800	39,400	2,300	10,200	120	1,340	------	530	51,100	30	50	156,900
Decatur	72,200	34,000	1,600	28,200	40	1,330	------	840	33,600	220	170	132,800
Delaware	86,500	58,000	5,100	500	9,000	2,210	------	1,120	40,000	5,800	40	117,800
Des Moines	66,900	28,300	1,500	19,500	380	3,730	------	1,000	25,400	30	320	83,800
Dickinson	64,900	50,700	4,000	------	1,850	100	750	610	13,700	11,630	220	52,200
Dubuque	67,500	49,800	7,300	600	5,140	280	------	2,370	59,400	600	70	152,200
Emmet	59,500	58,000	1,500	------	2,040	400	730	580	16,400	5,200	130	55,700
Fayette	92,100	76,100	5,500	500	7,770	480	80	1,630	59,800	11,000	20	155,900
Floyd	79,700	74,300	7,000	50	2,950	910	430	1,720	34,100	4,260	60	75,200
Franklin	114,200	84,800	2,400	100	3,340	250	70	1,680	32,900	7,680	20	85,900
Fremont	123,100	14,700	3,900	43,200	320	580	------	460	9,600	2,550	9,650	69,200
Greene	144,000	74,500	5,300	2,800	850	50	20	500	23,900	4,240	70	82,800
Grundy	105,600	78,000	3,400	1,200	3,250	40	20	2,060	23,200	7,230	20	65,300
Guthrie	114,600	48,800	9,200	7,100	1,490	130	------	450	28,400	3,320	300	114,400
Hamilton	135,000	88,500	4,200	600	1,550	50	30	1,160	22,700	4,890	160	75,200
Hancock	98,900	89,300	5,300	100	3,400	200	400	1,500	26,600	21,260	110	79,400
Hardin	109,700	75,600	2,800	300	3,380	90	30	970	28,600	4,800	120	78,200

Harrison	142,500	49,000	37,400	14,500	1,990	340	------------	1,040	9,000	6,480	16,450	93,900
Henry	69,400	32,800	1,600	11,100	210	1,330	------------	380	29,600	------------	70	102,100
Howard	47,200	60,500	5,500	150	4,900	480	1,500	1,080	35,200	11,780	10	79,700
Humboldt	91,100	68,200	4,000	400	2,720	100	40	540	19,400	5,560	210	45,800
Ida	86,100	54,800	5,400	100	2,920	50	30	1,370	24,500	1,740	1,880	59,400
Iowa	97,900	45,300	6,300	5,000	2,860	540	------------	1,370	38,000	430	20	119,600
Jackson	65,800	34,000	7,800	1,600	3,390	920	------------	1,440	60,200	1,480	80	193,000
Jasper	146,600	65,900	18,200	10,800	1,020	320	------------	720	37,000	640	110	143,600
Jefferson	66,600	80,600	1,500	10,500	110	960	------------	600	38,200	------------	50	101,200
Johnson	104,000	46,200	4,200	6,400	1,640	1,790	------------	1,440	43,800	560	100	131,500
Jones	76,500	42,400	8,100	600	6,770	390	------------	1,080	48,500	180	60	141,700
Keokuk	111,600	39,800	10,900	8,500	270	490	------------	820	41,100	10	40	127,000
Kossuth	174,400	153,300	7,400	200	4,720	290	2,790	2,830	36,200	27,480	270	120,100
Lee	58,200	24,000	1,900	18,100	430	10,000	------------	1,330	34,800	30	250	135,100
Linn	122,300	66,500	7,600	1,500	3,280	1,140	------------	1,970	47,600	2,800	160	126,000
Louisa	64,400	26,600	800	22,000	830	2,540	------------	860	19,500	180	110	78,000
Lucas	56,700	27,700	2,700	24,250	90	230	------------	200	27,200	70	70	121,200
Lyon	132,800	100,000	5,900	200	5,980	60	40	2,330	13,800	8,730	3,000	63,400
Madison	87,700	28,400	4,200	38,100	8,060	830	------------	530	21,900	1,230	220	142,200
Mahaska	113,900	44,100	9,000	14,600	520	350	------------	590	34,100	220	120	122,000
Marion	90,400	34,400	9,700	29,500	660	340	------------	380	27,900	290	120	135,100
Marshall	111,700	69,800	8,900	4,700	780	170	------------	880	32,400	300	20	88,600
Mills	107,300	19,300	9,600	26,600	1,050	320	------------	1,160	9,300	3,720	10,400	72,900
Mitchell	60,700	86,200	7,100	100	2,650	90	1,200	5,150	31,300	8,520	------------	74,200
Monona	130,500	27,900	43,700	21,000	1,260	200	30	3,000	9,600	9,860	14,520	94,000
Monroe	41,000	16,100	4,200	19,300	110	690	------------	290	28,600	40	40	130,500
Montgomery	93,100	24,100	11,500	33,000	970	670	------------	650	18,200	560	8,810	81,000
Muscatine	81,600	23,900	3,900	12,600	4,730	8,370	------------	1,380	25,100	530	400	84,600
O'Brien	114,300	86,600	2,800	200	5,890	40	150	1,370	23,700	6,890	1,140	77,000
Osceola	82,100	72,300	8,100	100	8,400	80	400	1,180	17,100	6,030	220	44,200
Page	103,600	27,000	7,300	56,600	380	860	------------	650	24,300	770	4,100	130,500
Palo Alto	112,400	80,700	3,300	100	1,260	330	1,250	970	17,100	18,800	120	59,500
Plymouth	191,300	91,300	57,000	1,100	4,560	120	20	2,060	24,700	18,600	12,320	116,100
Pocahontas	132,100	104,100	2,800	200	1,230	830	30	1,000	21,500	8,090	270	74,600
Polk	102,300	45,900	13,500	24,200	120	430	10	2,700	20,700	3,050	480	97,000
Pottawattamie	203,100	50,800	20,700	34,100	11,380	590	------------	2,460	27,400	6,530	17,900	134,700
Poweshiek	118,200	54,800	6,700	1,600	2,990	160	------------	840	30,200	80	100	118,800
Ringgold	81,000	30,500	1,400	22,200	200	540	------------	270	31,200	80	20	136,400
Sac	119,200	84,900	1,500	700	3,140	60	20	960	27,600	4,570	400	75,400
Scott	77,500	24,600	7,300	19,000	14,500	2,500	------------	3,470	32,600	1,670	1,000	83,600
Shelby	121,400	51,000	12,700	1,500	7,700	40	------------	1,060	30,400	3,510	2,840	107,200
Sioux	173,700	90,600	17,500	600	15,300	60	40	2,090	20,300	13,980	6,040	79,400
Story	141,000	78,300	3,800	4,000	90	130	60	150	24,600	2,740	220	70,200
Tama	126,200	78,100	8,800	1,300	8,480	300	------------	2,050	38,600	1,280	60	136,000
Taylor	93,300	31,600	1,600	33,000	340	720	------------	550	31,600	770	660	126,000
Union	68,900	29,900	1,500	17,800	1,200	250	------------	710	18,800	690	40	116,500
Van Buren	56,700	26,700	1,200	12,600	80	2,180	10	220	39,300	10	260	132,800
Wapello	55,200	22,300	3,200	21,300	300	920	------------	650	29,400	------------	150	97,600
Warren	82,600	56,500	7,200	54,400	990	550	------------	420	28,600	640	230	138,400
Washington	106,600	47,700	8,400	6,300	360	280	------------	620	39,700	20	60	119,000
Wayne	71,900	35,700	2,000	17,700	70	460	------------	140	45,200	60	80	128,200

IOWA CROPS, 1919, ESTIMATED NUMBER OF ACRES BY COUNTIES—Continued.

	Corn	Oats	Spring Wheat	Winter Wheat	Barley	Rye	Flax	Potatoes	Tame Hay	Wild Hay	Alfalfa	Pastures
Webster	151,300	116,400	7,000	500	840	30	20	840	26,500	10,510	680	87,200
Winnebago	65,800	53,700	12,600	200	4,840	40	1,500	1,640	20,100	18,700	50	56,800
Winneshiek	87,200	68,000	13,000	200	9,710	430	800	1,520	57,700	4,620	10	151,500
Woodbury	184,400	89,200	30,400	6,400	1,670	420	----------	1,720	17,900	8,550	20,500	110,800
Worth	51,400	54,400	9,700	100	3,020	270	2,050	1,180	25,600	13,270	40	63,400
Wright	116,300	88,700	5,400	400	2,980	80	220	710	29,000	4,780	70	73,200
Total	10,000,000	5,670,000	750,000	950,000	315,000	70,000	16,000	115,000	2,992,000	478,000	148,000	10,225,000

TABULATED CROP SUMMARY FOR THE YEAR 1919.—PART I

Counties	Corn		Oats		Spring Wheat		Winter Wheat		Barley	
	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels
Adair	40	4,684,000	33	1,405,800	10	100,000	17	241,400	21	105,420
Adams	34	2,628,000	37	995,300	9	42,300	16	350,400	31	40,920
Allamakee	50	2,150,000	39	1,560,000	10	73,000	18	21,600	29	179,800
Appanoose	37	1,850,000	30	765,000	8	22,400	15	264,000	22	660
Audubon	46	5,474,000	32	1,241,600	11	96,800	16	67,200	30	240,000
Benton	43	6,153,000	32	3,011,200	15	93,000	23	41,400	24	178,560
Black Hawk	32	3,376,000	37	2,608,500	15	54,000	17	17,000	29	159,210
Boone	44	5,768,000	40	3,136,000	12	60,000	15	31,500	30	35,100
Bremer	36	2,365,000	33	1,762,200	13	49,400	20	4,000	25	49,500
Buchanan	36	3,611,000	37	2,612,200	16	72,000	18	3,600	30	142,800
Buena Vista	42	5,267,000	37	3,518,700	9	25,200	16	4,800	27	28,350
Butler	30	3,099,000	29	2,372,200	12	45,600	19	950	25	43,250
Calhoun	48	7,018,000	42	4,250,400	7	14,700	15	9,000	28	22,680
Carroll	44	5,152,000	39	2,589,600	8	86,400	16	43,200	30	64,800
Cass	43	5,448,000	35	1,529,500	9	121,500	17	462,400	27	257,040
Cedar	47	5,118,000	38	1,539,000	13	59,800	22	178,200	23	236,900
Cerro Gordo	38	3,374,000	30	2,304,000	10	61,000	15	750	21	74,340
Cherokee	50	6,430,000	38	3,184,400	8	11,200	10	3,000	29	69,600
Chickasaw	35	2,205,000	26	1,586,000	9	59,400	14	700	19	53,580
Clarke	33	1,993,000	28	649,600	8	14,400	16	316,800	20	3,200
Clay	42	4,675,000	37	3,085,800	7	9,800	13	2,600	26	45,500
Clayton	48	3,571,000	35	2,184,000	16	134,400	22	44,000	26	254,800
Clinton	47	5,179,000	35	1,690,500	12	102,000	23	121,900	25	257,000
Crawford	42	5,897,000	34	2,193,000	8	250,400	16	25,600	27	84,780
Dallas	48	6,048,000	37	2,227,400	10	55,000	19	543,400	20	16,400
Davis	37	2,213,000	33	1,300,200	6	13,800	16	163,200	18	2,160
Decatur	33	2,383,000	26	884,000	5	8,000	16	451,200	18	720
Delaware	44	3,806,000	31	1,798,000	14	71,400	19	9,500	23	207,000
Des Moines	46	3,077,000	28	792,400	11	16,500	19	370,500	19	7,220
Dickinson	40	2,596,000	33	1,673,100	8	32,000	----	------------	25	46,250
Dubuque	48	3,240,000	29	1,444,200	14	102,200	18	10,800	20	102,800
Emmet	32	1,904,000	35	2,030,000	8	12,000	----	------------	22	44,880
Fayette	44	4,052,000	35	2,663,500	9	49,500	20	10,000	27	209,790
Floyd	38	3,029,000	29	2,154,700	11	77,000	15	750	23	67,850
Franklin	33	3,769,000	33	2,798,400	12	28,800	15	1,500	24	80,160
Fremont	42	5,170,000	34	499,800	9	35,100	17	734,400	29	9,280
Greene	43	6,192,000	38	2,831,000	8	42,400	14	89,200	30	25,500
Grundy	35	4,013,000	34	2,652,000	12	40,800	20	24,000	28	91,000
Guthrie	39	4,469,000	34	1,659,200	11	101,200	19	134,900	29	43,210
Hamilton	45	6,075,000	41	3,628,500	12	50,400	13	7,800	24	37,200
Hancock	37	3,659,000	35	3,125,500	9	47,700	12	1,200	25	85,000
Hardin	41	4,498,000	35	2,646,000	10	28,000	17	5,100	27	91,260
Harrison	39	5,557,000	34	1,666,000	9	336,600	16	232,000	27	53,730
Henry	42	2,915,000	33	1,082,400	10	16,000	18	199,800	25	5,250
Howard	39	1,841,000	25	1,512,500	10	55,000	20	3,000	26	127,400
Humboldt	40	3,644,000	38	2,591,600	9	36,000	15	6,000	28	76,160
Ida	46	3,961,000	40	2,192,000	6	32,400	14	1,400	26	75,920
Iowa	46	4,503,000	35	1,585,500	12	75,600	21	105,000	27	77,220
Jackson	44	2,895,000	36	1,224,000	12	93,600	18	28,800	26	88,140
Jasper	42	6,157,000	32	2,108,800	9	163,800	18	194,400	26	26,520
Jefferson	35	2,331,000	27	826,200	6	9,000	16	168,000	18	1,980
Johnson	45	4,680,000	37	1,709,400	15	63,000	21	134,400	26	42,640
Jones	45	3,442,000	32	1,356,800	16	49,600	22	13,200	25	169,250
Keokuk	43	4,799,000	34	1,353,200	9	98,100	17	144,500	25	6,750
Kossuth	39	6,802,000	34	5,212,200	9	66,600	10	2,000	25	118,000
Lee	36	2,095,000	32	768,000	10	19,000	19	343,900	22	9,460
Linn	46	5,626,000	36	2,394,000	15	114,000	20	30,000	25	82,000
Louisa	44	2,834,000	36	957,600	10	8,000	20	440,000	25	8,250
Lucas	35	2,041,000	25	692,500	9	24,300	15	363,750	27	2,430
Lyon	45	5,976,000	38	3,800,000	6	35,400	14	2,800	25	149,500
Madison	41	3,596,000	40	1,136,000	10	42,000	19	723,900	30	91,800
Mahaska	46	5,239,000	31	1,367,100	11	99,000	19	277,400	25	13,000
Marion	41	3,706,000	36	1,238,400	9	87,300	21	619,500	28	18,480
Marshall	46	5,138,000	35	2,443,000	10	89,000	22	103,400	30	23,400
Mills	40	4,292,000	31	598,300	8	76,800	15	399,000	25	26,250
Mitchell	42	2,549,000	38	3,275,600	13	92,300	15	1,500	26	68,900
Monona	37	4,828,000	34	948,600	9	393,300	14	294,000	22	27,720
Monroe	37	1,517,000	25	402,500	10	42,000	19	366,700	25	2,750
Montgomery	41	3,817,000	34	819,400	6	69,000	17	561,000	27	26,190
Muscatine	43	3,509,000	33	788,700	11	42,900	23	289,800	19	89,870

TABULATED CROP SUMMARY FOR THE YEAR 1919—PART I—Continued.

Counties	Corn		Oats		Spring Wheat		Winter Wheat		Barley	
	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels
O'Brien	44	5,029,000	39	3,377,400	10	28,000	13	2,600	26	153,140
Osceola	36	2,956,000	35	2,530,500	7	21,700	19	1,900	26	88,400
Page	38	3,937,000	35	945,000	10	73,000	18	1,018,800	23	8,740
Palo Alto	34	3,822,000	35	2,824,500	8	26,400	11	1,100	25	31,500
Plymouth	46	8,800,000	33	3,012,900	7	399,000	15	16,500	24	109,440
Pocahontas	40	5,284,000	36	3,747,600	9	25,200	14	2,800	29	35,670
Polk	46	4,706,000	35	1,606,500	9	121,500	21	508,200	29	3,480
Pottawattamie	40	8,124,000	39	1,981,200	10	207,000	16	545,600	26	295,880
Poweshiek	45	5,319,000	35	1,918,000	14	93,800	19	30,400	28	83,720
Ringgold	36	2,916,000	28	854,000	9	12,600	11	244,200	22	4,400
Sac	45	5,364,000	38	3,226,200	8	12,000	14	9,800	25	78,500
Scott	48	3,720,000	30	738,000	13	94,900	24	456,000	19	275,500
Shelby	42	5,099,000	36	1,836,000	8	101,600	12	18,000	27	207,900
Sioux	51	8,859,000	38	3,442,800	9	157,500	12	7,200	28	428,400
Story	42	5,922,000	34	2,662,200	10	38,000	16	64,000	29	2,610
Tama	41	5,300,000	33	2,577,300	11	96,800	17	22,100	25	212,000
Taylor	40	3,732,000	36	1,137,600	7	11,200	15	495,000	24	8.160
Union	33	2,274,000	32	956,800	8	12,000	15	267,000	22	26,400
Van Buren	35	1,984,000	30	801,000	9	10,800	17	214,200	24	1,920
Wapello	44	2,429,000	29	646,700	8	25,600	17	362,100	25	7,500
Warren	40	3,304,000	30	1,695,000	8	57,600	17	924,800	20	19,800
Washington	44	4,690,000	29	1,383,300	13	44,200	17	107,100	25	9,000
Wayne	34	2,445,000	30	1,071,000	7	14,000	15	265,500	24	1,680
Webster	44	6,657,000	40	4,656,000	11	77,000	15	7,500	30	25,200
Winnebago	39	2,566,000	34	1,825,800	8	100,800	18	2,600	26	125,840
Winneshiek	48	4,186,000	36	2,448,000	9	117,000	18	3,600	27	262,170
Woodbury	41	7,560,000	33	2,943,600	7	212,800	14	89,600	26	43,420
Worth	37	1,902,000	30	1,632,000	8	77,600	10	1,000	28	84,560
Wright	41	4,768,000	37	3,281,900	14	75,600	17	6,800	28	83,440
	41.6	416,622,000	34.6	196,391,500	9.5	7,145,300	17.4	16,508,600	25.5	8,022,800

TABULATED CROP SUMMARY FOR THE YEAR 1919.—PART II

Counties	Rye		Flax Seed		Potatoes		Hay, Tame		Hay, Wild		Alfalfa	
	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Bushels per acre	Total Bushels	Tons per acre	Total Tons	Tons per acre	Total Tons	Tons per acre	Total Tons
Adair	17	2,380	----	--------	38	30,780	1.7	35,360	1.2	2,004	2.0	220
Adams	16	2,400	----	--------	36	18,000	1.5	30,150	1.4	2,478	2.5	1,050
Allamakee	17	8,500	9.5	475	50	63,500	1.7	89,590	1.6	1,968	3.1	62
Appanoose	14	11,200	----	--------	32	11,200	1.4	57,820	1.6	1,344	3.1	155
Audubon	17	340	----	--------	25	20,500	1.6	35,520	1.2	1,788	3.1	3,720
Benton	17	18,870	----	--------	30	30,900	1.6	63,040	1.0	2,030	3.1	341
Black Hawk	19	62,700	9.5	190	40	64,800	2.0	45,200	1.2	9,624	3.1	186
Boone	19	1,520	9.5	950	36	16,200	1.7	45,560	1.1	7,997	2.0	600
Bremer	16	17,600	9.5	190	26	38,220	1.8	36,360	1.4	28,504	3.1	217
Buchanan	19	29,260	9.5	95	36	38,520	1.9	54,720	1.6	19,200	3.1	124
Buena Vista	17	6,970	9.5	570	40	45,200	1.7	38,930	1.4	10,024	3.0	2,100
Butler	15	18,450	9.5	95	30	45,600	1.7	46,580	1.1	11,660	2.5	50
Calhoun	18	1,260	9.5	190	35	18,900	1.6	33,440	1.1	3,399	3.5	910
Carroll	15	450	----	--------	53	97,520	1.7	51,850	1.4	9,072	2.8	1,008
Cass	17	6,120	----	--------	30	29,100	1.6	39,680	1.2	1,068	2.3	1,380
Cedar	19	12,730	----	--------	32	27,520	2.0	91,400	1.5	195	4.0	440
Cerro Gordo	17	1,700	10.0	2,000	53	75,260	1.6	48,800	1.2	9,960	3.1	434
Cherokee	17	850	9.5	95	52	61,880	2.1	56,700	1.5	11,850	2.5	6,825
Chickasaw	16	8,160	9.5	3,325	20	27,000	1.5	49,500	1.4	18,760	----	--------
Clarke	18	3,060	----	--------	30	6,600	1.3	37,310	1.5	120	3.0	360
Clay	17	2,550	9.5	3,610	38	34,580	1.5	35,250	1.2	13,680	3.1	1,612
Clayton	18	12,240	----	--------	38	77,520	2.0	133,400	1.5	1,725	3.1	186
Clinton	19	39,710	----	--------	34	31,620	1.5	83,700	1.2	1,740	3.0	360
Crawford	18	3,960	----	--------	56	85,680	1.8	82,980	1.5	7,410	2.9	14,790
Dallas	18	3,600	----	--------	36	13,320	1.8	37,440	1.2	2,280	3.3	1,980
Davis	14	18,760	----	--------	44	23,320	1.6	81,760	1.6	48	1.8	90
Decatur	12	15,960	----	--------	44	36,960	1.2	40,320	1.0	220	3.5	595
Delaware	15	33,150	----	--------	27	30,240	1.7	68,000	1.2	6,960	3.1	124
Des Moines	16	59,680	----	--------	52	52,000	1.4	35,560	2.0	60	4.0	1,280
Dickinson	16	1,600	10.0	7,500	50	30,500	1.6	21,920	1.1	12,793	3.5	770
Dubuque	19	5,320	----	--------	40	94,800	1.6	95,040	0.8	480	3.0	210
Emmet	15	6,000	10.0	7,300	34	19,720	1.4	22,960	1.0	5,200	3.0	390
Fayette	18	8,640	9.5	760	42	68,460	2.0	119,600	1.1	12,100	3.1	62
Floyd	15	13,650	9.5	4,085	40	68,800	1.5	51,150	1.5	6,390	3.1	186
Franklin	15	3,750	9.5	665	30	50,400	1.6	52,640	1.1	8,448	3.1	62
Fremont	19	11,020	----	--------	47	21,620	1.7	16,320	2.0	5,100	3.2	30,880
Greene	18	900	9.5	190	28	14,000	1.4	33,460	1.2	5,088	2.0	140
Grundy	21	840	9.5	190	42	86,520	1.5	34,800	1.0	7,230	3.1	62
Guthrie	20	2,600	----	--------	32	14,400	1.7	48,280	1.5	4,980	2.5	750
Hamilton	18	900	9.5	285	55	63,800	2.1	47,670	1.2	5,868	3.1	496
Hancock	14	2,800	8.0	3,200	53	79,500	1.5	39,900	1.0	21,260	3.5	385
Hardin	15	1,350	9.5	285	35	33,950	1.5	42,900	1.0	4,800	3.1	372
Harrison	19	6,460	----	--------	50	52,000	1.8	16,200	1.3	8,424	2.8	46,060
Henry	12	15,960	----	--------	52	19,760	1.7	50,320	----	--------	3.0	210
Howard	19	9,120	10.0	15,000	40	43,200	1.5	52,800	1.0	11,780	3.1	31
Humboldt	20	2,000	9.5	380	51	27,540	1.7	32,980	0.9	5,004	3.3	693
Ida	18	900	9.5	285	50	68,500	1.8	44,100	1.3	2,262	2.8	5,264
Iowa	15	8,100	----	--------	39	53,430	2.0	76,000	1.6	688	3.1	62
Jackson	16	14,720	----	--------	45	64,800	2.0	120,400	1.6	2,368	4.0	320
Jasper	16	5,120	----	--------	27	19,440	1.7	62,900	1.3	832	2.8	308
Jefferson	11	10,560	----	--------	50	30,000	1.5	57,300	----	--------	3.1	155
Johnson	14	25,060	----	--------	40	57,600	1.7	74,460	1.6	896	3.0	300
Jones	13	5,070	----	--------	40	43,200	2.0	97,000	1.0	180	4.0	240
Keokuk	15	7,350	----	--------	50	41,000	1.9	78,090	1.6	16	4.8	192
Kossuth	16	4,640	10.0	27,900	50	141,500	1.3	47,060	1.0	27,480	2.0	540
Lee	15	150,000	----	--------	60	79,800	1.7	59,160	1.6	48	3.8	950
Linn	19	21,660	----	--------	45	88,650	1.6	76,160	1.2	3,360	3.5	560
Louisa	15	38,100	----	--------	45	38,700	1.5	29,250	1.6	288	4.0	440
Lucas	15	3,450	----	--------	20	4,000	1.4	38,080	1.0	70	3.1	217
Lyon	16	960	9.5	380	68	158,440	1.8	24,840	1.2	10,476	2.8	8,400
Madison	19	6,270	----	--------	26	13,780	1.6	35,040	1.2	1,476	2.7	594
Mahaska	17	5,950	----	--------	45	26,550	1.8	61,380	1.4	308	3.1	372
Marion	16	5,440	----	--------	31	11,780	1.8	50,220	1.5	435	3.8	456
Marshall	18	3,060	----	--------	40	35,200	1.8	58,320	1.0	300	3.5	70
Mills	16	5,120	----	--------	40	46,400	1.5	13,950	1.5	5,580	3.0	31,200
Mitchell	20	1,800	9.5	11,400	[illegible]	[illegible]09,000	1.8	56,340	2.0	7,040	----	--------
Monona	20	4,000	9.5	[illegible]	[illegible]	20,000	1.9	18,240	1.7	16,762	3.4	49,368
Monroe	16	11,040	----	----	[illegible]	8,700	1.2	34,320	1.6	64	3.0	120
Montgomery	18	12,060	----	----	[illegible]	[illegible]200	1.5	27,300	1.0	560	3.0	11,430
Muscatine	15	50,550	----	----	[illegible]	[illegible]100	1.6	40,160	1.6	848	2.8	1,120

TABULATED CROP SUMMARY FOR THE YEAR 1919—PART II—Continued.

Counties	Rye		Flax Seed		Potatoes		Hay, Tame		Hay, Wild		Alfalfa	
	Bushels per acre	Total Bushels	Bushels per acre	Total Bushel	Bushels per acre	Total Bushels	Tons per acre	Total Tons	Tons per acre	Total Tons	Tons per acre	Total Tons
O'Brien	17	680	9.5	1,425	45	61,650	1.8	42,660	1.3	8,957	4.	5,130
Osceola	15	450	9.5	3,800	40	47,200	1.5	25,650	1.5	9,045	3.1	682
Page	18	15,480	----	--------	49	31,850	1.7	41,310	1.1	847	3.1	12,710
Palo Alto	16	5,280	10.0	12,500	34	32,980	1.2	20,520	1.2	22,560	3.0	360
Plymouth	17	2,040	9.5	190	50	103,000	1.6	39,520	1.6	29,760	3.6	44,352
Pocahontas	17	14,110	8.0	240	37	37,000	1.7	36,550	1.5	12,135	3.1	837
Polk	20	8,600	9.5	95	34	91,800	1.6	33,120	1.4	4,270	1.6	768
Pottawattamie	20	11,800	----	--------	40	98,400	1.9	52,060	1.3	8,489	3.8	68,020
Poweshiek	16	2,560	----	--------	43	36,120	1.9	57,380	1.6	128	3.1	310
Ringgold	12	6,480	----	--------	43	11,610	1.4	43,680	1.2	96	2.2	44
Sac	16	960	9.5	190	50	48,000	1.4	38,640	1.5	6,855	3.5	1,400
Scott	17	42,500	----	--------	36	124,920	1.8	58,680	1.2	2,004	3.6	3,600
Shelby	16	640	----	--------	30	31,800	1.2	36,480	1.7	5,967	2.0	5,680
Sioux	17	1,020	9.5	380	70	146,300	1.8	36,540	2.0	27,960	2.7	16,308
Story	18	2,340	9.5	570	45	6,750	1.8	44,280	1.6	4,384	2.6	572
Tama	18	5,400	----	--------	37	75,850	1.6	61,760	1.6	2,048	3.1	186
Taylor	15	10,800	----	--------	45	24,750	1.7	53,720	1.0	770	3.1	2,046
Union	13	3,250	----	--------	30	21,300	1.2	22,560	1.5	1,035	2.5	100
Van Buren	12	26,160	9.5	95	41	9,020	1.4	55,020	1.6	16	2.7	702
Wapello	12	11,040	----	--------	33	21,450	1.7	49,980	----	--------	2.5	375
Warren	14	7,700	----	--------	38	15,960	1.3	37,180	.8	512	3.1	713
Washington	15	4,200	----	--------	22	13,640	1.7	67,490	1.6	32	3.1	186
Wayne	12	5,520	----	--------	34	4,760	1.3	58,760	1.6	96	3.0	240
Webster	18	540	9.5	190	40	33,600	1.8	47,700	1.3	13,663	2.9	1,972
Winnebago	16	640	9.8	14,700	47	77,080	1.9	38,190	2.0	37,400	3.7	185
Winneshiek	20	8,600	8.0	6,400	47	71,440	1.6	92,320	1.3	6,006	3.1	31
Woodbury	18	7,560	----	--------	50	86,000	1.9	34,010	1.6	13,680	3.6	73,800
Worth	16	4,320	8.5	17,425	40	47,200	1.8	46,080	1.0	13,270	3.1	124
Wright	17	1,360	10.0	2,200	50	35,500	1.4	40,600	1.1	5,258	3.5	245
	15.9	1,110,050	9.5	152,275	43.0	4,942,110	1.6	4,957,370	1.3	631,693	3.2	477,314

TABULATED CROP SUMMARY, 1919.

Crop	Acres	Average Yield	Average Price	Total Yield	Total Value
Corn	10,000,000	41.6 bu.	$ 1.17	416,622,000	$487,447,740
Oats	5,670,000	34.6 "	.64	196,391,500	125,690,560
Spring Wheat	750,000	9.5 "	1.89	7,145,300	13,504,617
Winter Wheat	950,000	17.4 "	1.98	16,508,600	32,687,028
Barley	315,000	25.5 "	1.11	8,022,800	8,905,308
Rye	*70,000	15.9 "	1.33	1,110,050	1,476,366
Flax Seed	16,000	9.5 "	3.90	152,275	593,872
Timothy Seed	200,000	4.5 "	4.91	900,000	4,419,000
Clover Seed	60,000	1.4 "	24.92	84,000	2,093,280
Potatoes	115,000	43.0 "	1.94	4,942,110	9,587,693
Hay (Tame)	2,992,000	1.6 tons	18.37	4,957,370	91,066,887
Hay (Wild)	478,000	1.3 "	16.48	631,693	10,410,301
Alfalfa	148,000	3.2 "	23.09	477,314	11,021,180
Pasture and Grazing (estimated)	----------	----------	--------	------------	100,000,000
Ensilage (estimated)	----------	----------	--------	------------	20,000,000
Sweet Corn (commercial crop)	40,000	3.0 "	13.50	120,000	1,620,000
Pop Corn (estimated)	29,300	24.9 bu.	3.79	729,570	2,765,070
Buckwheat (estimated)	7,000	14.0 "	1.95	98,000	191,100
Fruit Crop (estimated)	----------	----------	--------	------------	7,000,000
Garden Truck (estimated)	----------	----------	--------	------------	8,000,000
Sugar Beets for manufacture (estimated)	8,000	8.0 tons	9.00	64,000	576,000
Miscellaneous (estimated)	----------	----------	--------	------------	11,000,000
Total	----------	----------	--------	------------	$950,056,002

*For grain only; does not include approximately 40,000 acres used for pasture.

WINTER WHEAT AND RYE

Preliminary Estimate of Acreage Seeded in the Fall of 1919, and the Percentage Condition, December 1, 1919.

Counties	Winter Wheat		Rye	
	Condition	Acres	Condition	Acres
District No. 1—				
Buena Vista	95	200	90	320
Cherokee	94	10	90	40
Clay	97	140	98	120
Dickinson	----	--------	95	80
Emmet	----	--------	90	310
Lyon	94	100	90	50
O'Brien	93	110	95	30
Osceola	93	30	93	20
Palo Alto	94	50	95	250
Plymouth	93	780	92	90
Pocahontas	90	90	86	640
Sioux	88	400	90	50
For District	93	1,910	92	2,000
District No. 2—				
Butler	95	30	96	950
Cerro Gordo	96	40	93	80
Floyd	94	30	90	700
Franklin	90	400	94	190
Hancock	93	50	89	150
Humboldt	95	320	87	80
Kossuth	95	100	89	220
Mitchell	96	70	92	70
Winnebago	94	10	90	30
Worth	----	--------	89	210
Wright	95	70	90	60
For District	94	1,120	91	2,740
District No. 3—				
Allamakee	99	1,030	99	380
Black Hawk	95	700	85	2,540
Bremer	98	140	97	850
Buchanan	95	100	92	1,190
Chickasaw	96	20	92	390
Clayton	98	1,900	97	520
Delaware	97	220	94	1,620
Dubuque	98	390	97	220
Fayette	95	440	96	370
Howard	92	110	96	370
Winneshiek	97	170	97	330
For District	96	5,220	95	8,780
District No. 4—				
Audubon	90	2,100	94	20
Calhoun	95	300	93	50
Carroll	93	1,080	92	20
Crawford	98	1,200	90	170
Greene	96	1,820	90	40
Guthrie	87	3,480	95	110
Harrison	96	10,440	94	260
Ida	95	90	92	40
Monona	92	14,700	93	150
Sac	94	280	90	50
Shelby	97	750	95	30
Woodbury	90	5,500	90	320
For District	94	41,740	94	1,260
District No. 5—				
Boone	93	1,260	90	60
Dallas	98	13,730	98	150
Grundy	89	480	89	30
Hamilton	95	330	90	40
Hardin	90	150	90	70
Jasper	96	5,400	95	250
Marshall	88	3,100	94	130
Polk	90	10,100	92	330
Poweshiek	87	640	94	120
Story	95	1,200	92	110
Tama	95	1,040	96	230
Webster	93	370	90	20
For District	92	37,800	92	1,540
District No. 6—				
Benton	97	1,260	95	850
Cedar	96	4,860	95	520
Clinton	97	3,970	95	1,610
Iowa	97	2,950	96	420
Jackson	96	960	96	710
Johnson	97	2,500	96	1,380
Jones	98	400	96	300
Linn	94	720	96	1,080
Muscatine	94	8,440	90	2,660
Scott	95	10,830	95	1,920
For District	96	36,890	95	11,450
District No. 7—				
Adair	88	4,690	95	110
Adams	86	9,200	95	120
Cass	92	14,690	92	280
Fremont	90	21,300	95	450
Mills	91	9,310	95	250
Montgomery	92	16,500	94	520
Page	90	22,640	95	660
Pottawattamie	92	14,950	93	400
Taylor	90	12,210	96	560
For District	90	125,490	94	3,350
District No. 8—				
Appanoose	90	8,800	95	620
Clarke	90	9,100	92	130
Decatur	93	14,100	94	1,000
Lucas	85	12,150	90	180
Madison	91	14,100	94	250
Marion	85	13,280	90	260
Monroe	84	9,840	90	530
Ringgold	88	6,660	91	420
Union	90	5,870	93	190
Warren	91	22,850	93	420
Wayne	95	7,790	95	350
For District	89	124,540	92	4,350
District No. 9—				
Davis	95	4,390	96	1,000
Des Moines	90	11,500	95	2,880
Henry	90	4,440	93	1,000
Jefferson	90	4,510	95	740
Keokuk	93	4,250	93	380
Lee	94	14,480	96	7,700
Louisa	95	9,900	93	1,950
Mahaska	90	5,990	92	270
Van Buren	92	7,300	98	1,680
Wapello	93	13,630	90	710
Washington	90	2,900	94	220
For District	92	83,290	94	18,530
For the state	91	458,000	94	54,000

VALUE OF OFFICIAL CROP REPORTS.

1. Farmers are benefited by official crop reports both directly and indirectly; directly by being kept informed of crop prospects and prices outside of their own immediate districts, and indirectly because the disinterested and unprejudiced official reports tend to prevent the circulation of false or misleading reports by speculators who are interested in controlling or manipulating prices. Without the steadying influence of official reports, these speculators would issue so many conflicting and misleading reports that it would be impossible for anyone, without great expense, to form an accurate estimate of crop conditions and prospects. The farmer would be left almost entirely at the mercy of the speculator.

2. Violent fluctuations in prices are the speculator's paradise; they widen the gulf between producer and consumer and the speculator takes the cream. Farmers suffer most from such conditions for they are not so well organized as other lines of business, nor are they in position to take advantage of fluctuations in market prices. Official crop reports steady prices and lessen the cost of distribution by diminishing speculators' profits. The farmer who reads the official estimates and forecasts as they are issued, can judge for himself what the crop prospects are, as well as the probable prices, so that he can decide intelligently how and when to market his products. Even the farmer who does not keep posted is indirectly benefited by the check which official estimates place upon fluctuations emanating from false reports. Buyers must have a larger margin of profit to protect themselves against wide fluctuations in price.

3. Refusal of the farmer to give crop information to the State and Government does not prevent buyers and speculators from knowing the condition of the crop. The latter have systems of their own for collecting information and it is assumed they would like to see official crop reports abolished. They have traveling agents and correspondents throughout the United States who keep them posted and they are advised of important influences and tendencies in acreages and production far in advance of what the farmer would be if unaided by the official crop reporting service.

4. Feeder stock, cattle, sheep and hogs are more intelligently distributed by the farmers among themselves and through terminal markets, if county figures on crop production are available. The importance of this is shown by the fact that about 80 per cent of Iowa's soil products go to market in the form of meat and dairy products. This service has been frequently called upon for such information in recent years, particularly when as in 1918 a portion of the State had almost a corn failure. When pastures fail this service is consulted as to the nearest available pasture. It is intended, so far as appropriations will permit, to furnish farmers with up-to-the-minute information on live stock, as to the visible supply, probable movements to markets, extent of breeding, etc.

5. Railroads use official crop reports in distributing cars for transporting farm products. Cars must be kept continuously in motion and travel no unnecessary miles. Marketing is sometimes brought to a standstill by car shortage. Accurate county and district crop reports reduce this provoking situation to the minimum.

6. Manufacturers and distributors of farm machinery and other commodities essential to farmers, can more intelligently and prudently purchase raw materials and plan their output and distribution when fully advised as to crop prospects in the various sections of the country through accurate, official reports. In this way distribution can be most economically done. Faulty distribution, resulting in long holding in stock or unnecessary transportation, adds to the cost, and the farmer "pays the freight." By avoiding heavy losses from improper distribution, the manufacturers can afford to sell on better terms with resulting benefit to farmers.

7. Banks and financial institutions use current official live stock and crop data in providing funds for financing the growing, storage, marketing and movement of farm products.

8. Wise legislation affecting farmers' interests cannot be enacted without accurate, detailed and up-to-date agricultural statistics. Official crop reports supply this information.

9. When farmers' organizations lay out a program of action, the first need that confronts them is accurate, unbiased records of agricultural production. The best obtainable information is in the official crop reports. These can be made better, that is, more detailed, more inclusive, by the earnest co-operation of these organizations with the official crop reporting service.

10. Such grain and produce buyers as are earnestly striving to render intelligent service to their communities in return for reasonable profits, welcome dependable official crop reports. The steadying influence these reports have upon the market, makes it safe for them to handle farm products on a narrower margin which means higher prices to the farmer. Where they are dealing on a straight market and unbiased by speculative transactions they are enabled by intelligent use of the reports, to advise their farmer patrons in marketing matters, to their mutual advantage. Through years of experience in cleaning, handling, storing, transporting and marketing farm products, these men acquire a fund of experience that is of value to the community.

11. Finally, whenever a farmer furnishes careful, conscientious information for an official crop report, he is helping himself, his brother farmers, his community as a whole, and his State, and is doing his bit to assist his city cousins in their struggle against the high cost of living.

NOTES FROM THE DECEMBER 1 CROP REPORT.

About 60 per cent of farm lands to be plowed was completed December 1.

The wages of male farm labor in Iowa during 1919 were as follows: Average rate per month when hired by the year with board, $55.65, without board, $71.43; average wage per day for day labor for harvest work with board, $4.46, without board, $5.20; average wage per day for day labor for other than harvest work with board, $3.46, without board, $4.24.

The average number of cords of firewood burned per farm, 1919, is estimated at 9 cords, with an average price of $5.91

PART IX

Farm Statistics for the Year Ending December 31, 1919. Collected by Township Assessors, Reported by County Auditors and Tabulated by the Iowa Department of Agriculture.

The tables presented herewith cover farm and live stock statistics collected through the township assessors and reported to the Iowa Department of Agriculture by the County Auditors.

Special attention is called to new items in these tables which show the number of modern homes and the number of automobiles on farms. They indicate the forward trend of Iowa farmers toward more and more of the modern improvements and conveniences which are boasted in the cities.

The increase in the number of farms reported as compared to the report for 1918 is due largely to a change in the inquiry made to conform to federal requirements of reporting these. In the 1918 report all farms of five acres or more were listed, whereas for 1919 all farms of three acres or more were counted.

It is the sense of the Iowa Department of Agriculture that a special appropriation should be made to employ the necessary clerical help to verify the books of the township assessors and prepare them for publication. The tremendous amount of work necessary to prepare these tables for the Year Book of Agriculture is now being done by the present small force of the Department of Agriculture.

TABLE NO. 1

Total number, average size and total acreage of farms, total acreage occupied by farm buildings, public highways and feed lots, acreage in pasture, crops not otherwise enumerated, and land not utilized for any purpose. Number of tractors, autos, auto-trucks and silos on farms, and number of tons silage put up, and total bushels apples harvested, by counties, for the year 1919.

Counties	Number of farms	Average size of farms	Total acreage of farms	Total number of acres occupied by farm buildings, public highways and feed lots	Acreage in pasture	Number bushels of apples harvested	Acreage in crops not otherwise enumerated	Acreage in waste land not utilized for any purpose	Number of tractors on farms	Number of silos on farms	Number of tons of silage put up	Number of auto-trucks on farms	Number of automobiles on farms
Adair	2,043	167	341,025	15,953	101,140	6,315	821	307	65	231	18,635	89	1,769
Adams	1,541	162	249,570	10,110	95,905	8,695	582	1,243	45	177	12,640	69	1,212
Allamakee	2,451	164	401,379	10,640	183,634	13,377	158	50,691	68	362	28,059	36	1,734
Appanoose	2,017	133	267,894	9,458	125,126	2,915	810	4,447	40	77	3,026	23	4,181
Audubon	1,767	154	272,540	13,682	71,998	4,801	4,696	960	65	171	14,568	183	1,758
Benton	2,571	164	438,871	21,892	119,642	4,021	366	721	305	552	46,003	133	2,083
Black Hawk	2,101	157	331,689	14,875	99,994	10,447	875	2,747	226	797	69,755	75	2,019
Boone	2,454	139	340,731	16,119	82,273	5,736	485	1,473	267	254	20,165	82	2,293
Bremer	1,849	134	247,684	11,119	70,359	4,598	527	1,239	138	538	46,458	38	1,457
Buchanan	2,438	143	349,290	14,590	100,665	5,511	9,073	1,450	81	382	32,821	29	1,701
Buena Vista	2,062	169	349,267	19,224	66,865	3,524	433	1,490	282	338	27,718	166	1,993
Butler	2,130	160	341,529	17,718	93,749	4,097	297	986	142	359	30,468	24	1,598
Calhoun	2,050	166	340,809	16,905	53,666	2,899	141	2,086	343	77	7,147	30	1,880
Carroll	1,958	171	334,301	17,543	78,523	2,315	256	1,499	242	113	11,194	183	1,930
Cass	2,258	156	351,702	14,772	103,683	13,905	1,150	2,436	163	201	18,686	243	2,103
Cedar	2,343	149	349,274	13,855	117,502	2,762	99	1,058	201	281	23,808	44	1,986
Cerro Gordo	1,878	173	325,108	15,757	80,917	7,518	1,027	5,909	147	423	41,458	27	1,435
Cherokee	1,820	194	252,593	18,692	80,098	2,835	276	1,621	293	237	25,695	203	1,788
Chickasaw	1,888	150	283,598	13,743	85,180	3,479	475	1,067	76	350	32,148	13	1,279
Clarke	1,478	174	258,167	10,584	110,445	2,618	547	2,922	36	150	12,179	30	901
Clay	1,744	191	333,147	16,213	80,677	2,236	98	3,704	298	210	20,499	37	1,653
Clayton	3,023	151	457,426	15,682	186,042	15,194	406	15,403	256	471	33,377	38	2,153
Clinton	2,500	156	399,973	16,626	140,455	625	335	2,880	214	315	33,208	34	2,258
Crawford	2,395	182	436,265	21,197	121,531	5,887	313	2,756	204	106	9,772	168	2,266
Dallas	2,304	154	354,970	16,003	98,430	7,869	412	3,853	304	284	30,007	153	1,937
Davis	2,164	144	311,959	8,494	150,246	4,728	211	3,342	38	64	3,054	27	1,243

Decatur	1,891	165	311,600	11,383	134,284	6,128	1,728	3,824	59	81	5,021	47	1,101
Delaware	2,152	162	348,846	14,465	114,371	3,497	43	3,426	137	665	49,434	26	1,601
Des Moines	1,766	132	234,210	7,538	81,646	15,388	768	8,745	148	301	11,808	42	1,310
Dickinson	1,085	193	210,123	10,276	52,983	2,534	237	2,557	94	95	8,793	21	888
Dubuque	2,217	156	347,390	10,015	131,465	7,657	1,202	3,551	94	176	12,329	70	1,551
Emmet	1,073	205	219,860	10,876	49,919	2,925	271	3,999	123	222	22,575	27	903
Fayette	3,119	138	430,345	10,671	151,714	10,154	458	3,996	131	719	54,071	31	2,004
Floyd	2,024	148	360,956	13,791	76,792	3,588	1,382	2,397	115	479	41,177	7	1,326
Franklin	2,018	173	349,673	18,252	83,500	2,541	849	2,025	275	404	47,030	27	1,727
Fremont	1,925	158	303,733	11,877	75,659	70,285	879	7,240	133	105	9,341	105	1,406
Greene	1,962	175	343,533	14,758	78,775	2,411	191	1,866	237	88	8,301	36	1,791
Grundy	1,712	180	309,142	18,995	71,681	1,834	465	183	261	274	31,881	100	1,642
Guthrie	2,228	154	344,564	15,345	114,418	4,338	788	2,386	92	97	8,061	162	1,832
Hamilton	2,120	163	347,116	16,576	70,507	2,806	156	2,058	286	286	25,582	91	1,980
Hancock	1,859	188	349,118	17,879	80,692	4,121	3,801	6,691	156	315	27,439	19	1,475
Hardin	1,888	170	321,996	16,938	78,087	3,937	42	1,143	196	298	32,837	15	1,707
Harrison	2,592	156	404,587	15,915	103,152	32,193	1,526	10,887	251	102	9,013	87	1,956
Henry	1,816	139	252,347	9,833	99,580	1,845	378	1,531	178	123	9,952	280	1,470
Howard	1,650	165	271,897	13,182	83,120	6,353	50	3,590	65	343	25,125	31	1,007
Humboldt	1,439	178	256,587	13,679	41,442	1,739	499	2,671	290	321	35,848	75	1,387
Ida	1,661	164	273,043	14,542	62,957	3,379	44	707	203	69	6,250	134	1,446
Iowa	2,087	162	337,672	13,594	117,790	7,782	1,269	11,235	202	430	36,102	179	1,816
Jackson	2,318	145	376,933	10,259	182,535	8,961	66	7,281	70	323	28,650	37	1,466
Jasper	3,750	117	440,539	19,804	142,981	7,407	282	5,791	196	415	34,401	76	2,417
Jefferson	1,884	141	265,636	8,766	109,825	6,230	438	1,084	67	164	12,464	24	1,375
Johnson	2,462	143	352,875	13,072	126,125	6,557	185	4,119	295	420	35,583	150	1,949
Jones	2,307	150	345,522	10,987	146,624	4,230	1,073	3,202	132	410	44,200	30	1,538
Keokuk	2,609	133	347,109	14,842	125,093	4,613	293	5,093	130	293	24,744	58	1,857
Kossuth	2,942	198	584,712	28,767	116,299	7,334	1,017	11,014	464	629	62,545	90	2,638
Lee	2,244	139	312,475	9,456	142,407	18,860	1,740	12,679	58	285	17,422	48	1,321
Linn	3,170	137	434,183	16,786	168,814	11,156	1,182	5,727	125	660	53,771	67	2,008
Louisa	1,371	162	222,752	6,944	76,658	2,775	971	6,622	137	208	20,612	25	1,116
Lucas	1,571	160	251,737	7,719	115,062	6,156	303	2,320	90	282	31,581	36	1,134
Lyon	1,773	199	353,048	18,387	62,018	1,676	208	1,242	314	78	7,655	62	1,898
Madison	2,090	155	324,700	15,920	130,358	16,231	930	5,990	123	439	30,651	109	1,587
Mahaska	2,881	123	354,530	13,216	120,114	10,844	906	7,531	160	221	13,910	80	2,066
Marion	2,172	149	324,467	12,331	124,193	7,068	1,812	6,866	64	245	26,448	125	1,389
Marshall	2,228	154	343,067	17,539	88,754	4,780	332	2,074	244	393	35,399	63	2,064
Mills	1,693	154	261,143	10,507	69,109	103,503	2,292	5,864	136	86	8,105	95	1,455
Mitchell	1,902	148	281,811	14,191	70,936	3,411	1,343	2,068	174	486	49,693	21	1,250
Monona	2,215	178	394,319	16,015	100,286	12,003	5,871	13,181	344	84	5,476	157	1,614
Monroe	1,779	140	249,173	8,197	128,702	7,478	1,610	1,119	22	151	8,223	70	818
Montgomery	1,549	156	241,841	11,294	68,591	10,007	572	599	97	97	8,790	128	1,429
Muscatine	1,567	151	236,838	8,568	75,912	2,316	5,114	1,322	183	329	29,375	50	1,345
O'Brien	1,828	184	337,632	18,702	74,065	2,521	680	882	352	156	14,767	64	1,849
Osceola	1,218	198	241,706	12,867	47,788	1,546	125	2,618	179	108	9,316	39	1,126
Page	1,944	155	302,183	12,766	98,703	14,771	893	2,708	224	160	5,299	119	1,826
Palo Alto	1,718	185	318,286	15,606	64,778	2,282	81	4,447	219	170	18,967	120	1,485
Plymouth	2,649	195	516,056	26,209	108,023	2,756	828	1,016	373	165	17,265	431	2,702
Pocahontas	1,985	173	343,340	18,350	56,646	2,773	486	1,394	344	155	15,164	99	2,030

TABLE NO. 1—Continued.

Counties	Number of farms	Average size of farms	Total acreage of farms	Total number of acres occupied by farm buildings, public highways and feed lots	Acreage in pasture	Number bushels of apples harvested	Acreage in crops not otherwise enumerated	Acreage in waste land not utilized for any purpose	Number of tractors on farms	Number of silos on farms	Number of tons of silage put up	Number of auto-trucks on farms	Number of automobiles on farms
Polk	2,625	320	314,684	13,487	77,801	5,330	2,607	6,976	254	361	15,706	116	1,680
Pottawattamie	3,627	142	516,130	24,981	130,532	34,842	1,349	5,821	307	152	18,054	442	2,857
Poweshiek	2,166	160	347,174	12,958	114,878	3,541	100	770	185	323	29,994	152	1,782
Ringgold	1,878	163	307,363	13,034	127,861	11,166	412	2,068	24	217	14,974	21	1,387
Sac	1,843	188	346,747	18,755	74,285	1,415	162	1,580	236	146	17,797	171	1,920
Scott	2,173	125	272,011	10,568	78,083	5,840	1,046	2,054	181	366	31,126	135	1,994
Shelby	2,015	175	353,261	17,216	92,825	7,311	592	1,365	167	91	11,562	187	2,265
Sioux	2,761	169	468,030	23,100	79,126	720	179	532	323	304	28,077	140	2,707
Story	2,296	148	339,818	16,580	66,071	810	895	766	244	396	35,911	82	1,902
Tama	2,472	170	421,797	19,830	129,897	4,385	4,587	3,507	209	429	46,734	126	2,150
Taylor	2,120	150	317,853	15,682	117,106	16,367	426	2,476	60	253	17,555	135	1,627
Union	1,679	156	261,618	11,205	109,450	10,129	1,093	2,038	39	179	13,497	19	1,105
Van Buren	2,117	136	287,825	9,013	141,416	3,801	415	1,642	46	194	12,285	45	1,184
Wapello	1,915	129	246,946	8,610	101,152	6,705	760	3,573	59	121	7,413	57	1,144
Warren	2,297	150	344,950	14,390	137,075	16,620	735	4,107	139	293	23,602	69	1,574
Washington	2,043	161	330,345	12,192	121,449	4,998	442	2,564	171	207	13,332	84	1,963
Wayne	1,781	174	310,775	11,256	117,726	4,302	366	960	60	101	5,512	50	1,336
Webster	2,517	166	418,296	18,048	86,053	4,394	559	4,191	462	184	13,777	52	2,153
Winnebago	1,679	149	251,113	14,369	56,376	1,595	218	6,850	105	241	20,246	25	1,236
Winneshiek	2,846	147	418,740	17,665	149,761	9,965	93	8,995	118	412	32,009	55	2,023
Woodbury	2,587	181	467,726	20,972	104,127	7,928	4,798	7,059	240	243	26,625	198	2,160
Worth	1,584	154	243,840	13,048	61,601	2,804	1,158	5,070	170	231	20,891	19	1,087
Wright	1,769	194	344,398	16,422	66,625	2,553	742	4,271	303	177	18,398	59	1,627
Grand total	208,120	158	32,979,149	1,441,274	9,938,954	804,048	97,262	410,086	17,683	26,746	2,315,939	8,701	169,551

TABLE NO. 2

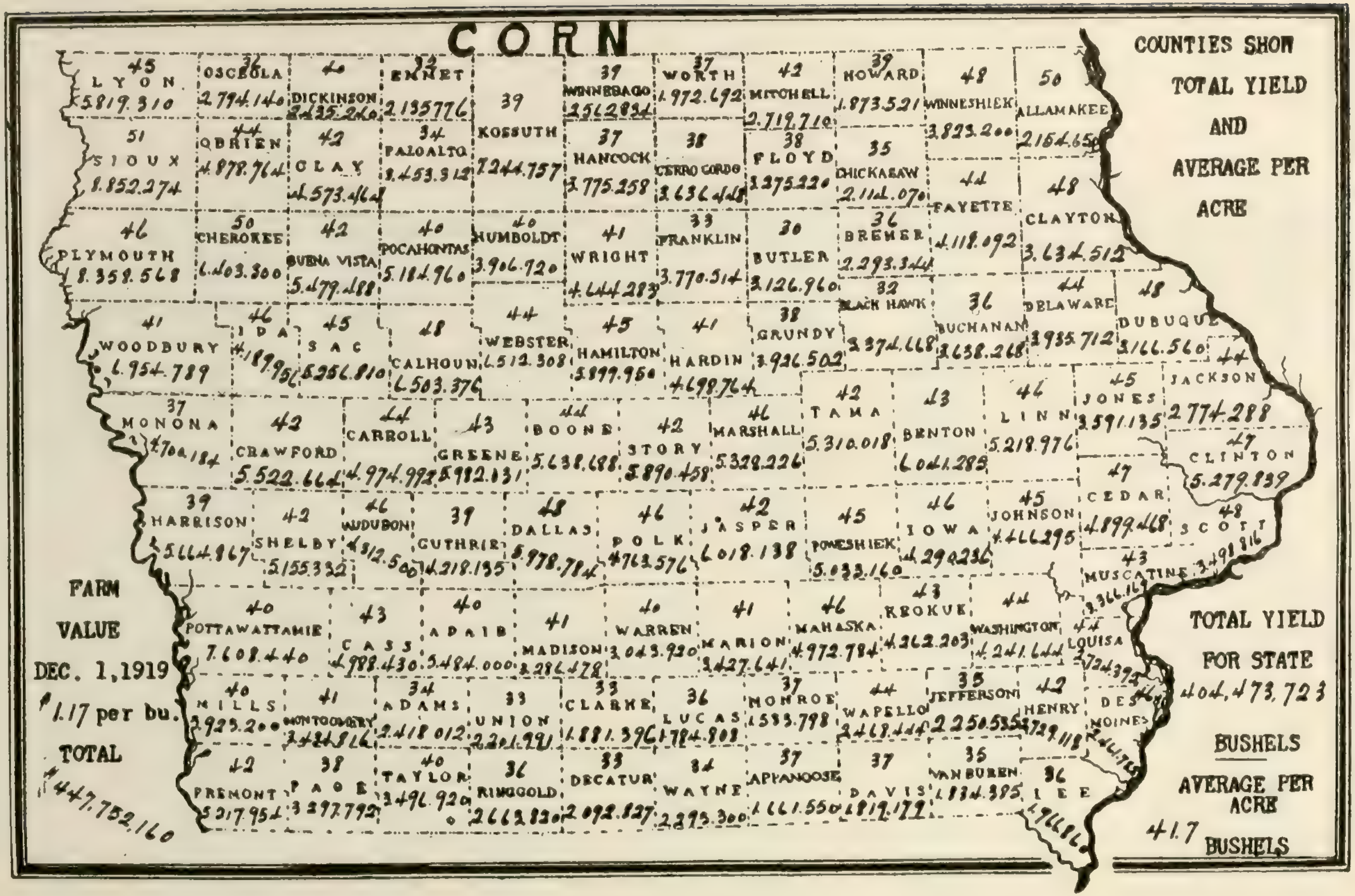
Average yield per acre and total yield of corn, oats, winter wheat, spring wheat and barley, by counties, for the year 1919

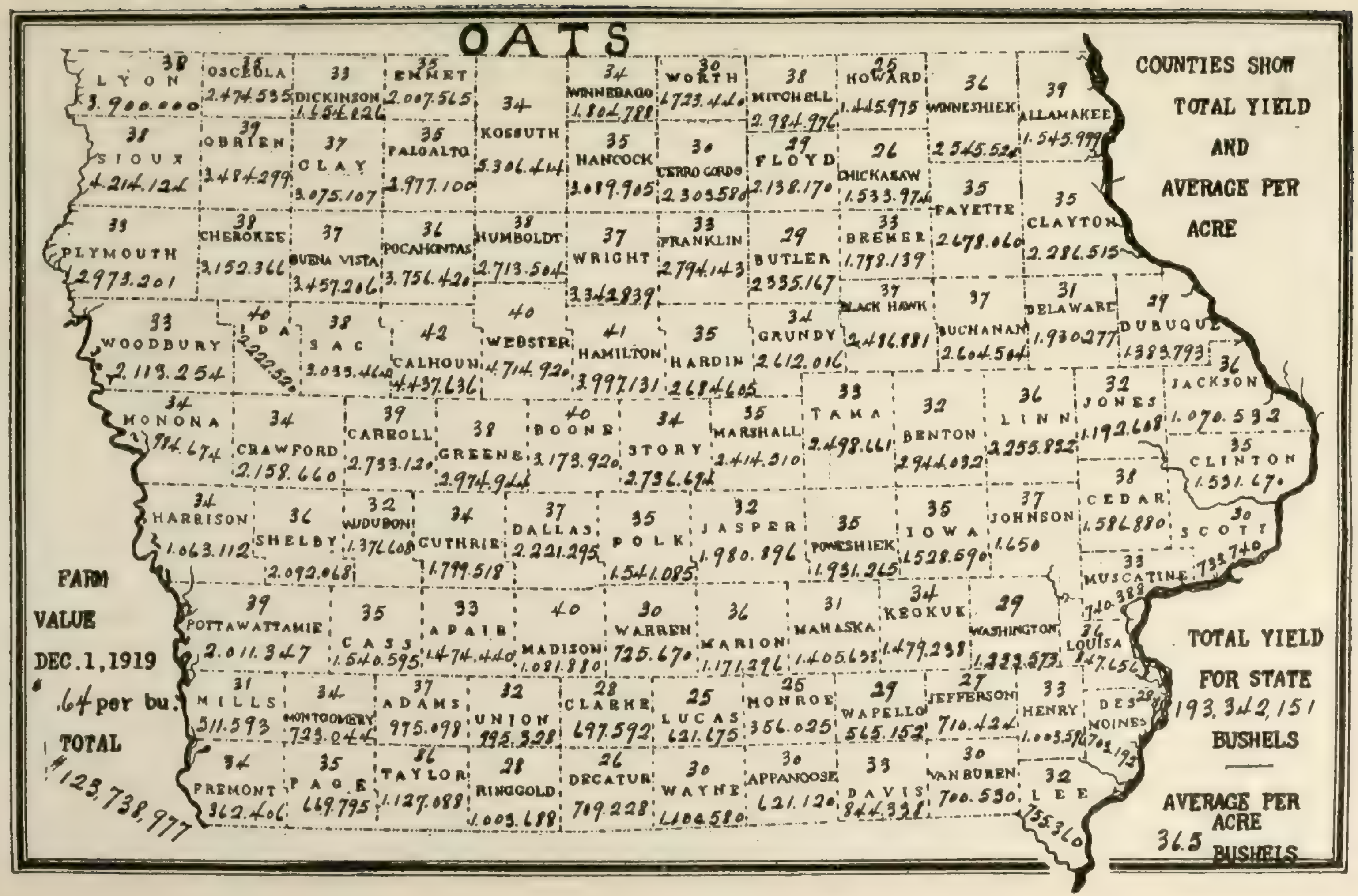
Counties	Corn			Oats			Winter Wheat			Spring Wheat			Barley		
	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels
Adair	109,680	40	5,484,000	44,680	33	1,474,440	12,956	17	220,252	8,055	10	80,550	6,622	21	139,062
Adams	71,118	34	2,418,012	26,354	37	975,098	20,614	16	329,824	1,581	9	14,229	1,235	31	38,285
Allamakee	43,093	50	2,154,650	39,641	39	1,545,999	1,126	18	20,268	6,264	10	62,640	4,282	29	124,178
Appanoose	44,907	37	1,661,550	20,704	30	621,120	14,586	15	218,790	5,016	8	40,128	20	22	440
Audubon	93,750	46	4,312,500	43,018	32	1,376,608	2,112	16	33,792	10,816	11	118,976	6,090	30	18,270
Benton	140,495	43	6,041,285	92,001	32	2,944,032	2,099	23	48,277	2,623	15	39,345	5,174	24	124,176
Black Hawk	105,459	32	3,374,668	67,213	37	2,486,881	1,282	17	21,794	1,828	15	27,428	3,266	29	94,714
Boone	128,152	44	5,638,688	79,348	40	3,173,920	2,751	15	41,265	3,669	12	44,388	658	30	19,740
Bremer	63,704	36	2,293,344	53,883	33	1,778,139	313	20	6,280	858	13	11,154	1,437	25	35,925
Buchanan	101,063	36	3,638,268	70,392	37	2,604,504	242	18	4,356	1,070	16	17,120	2,528	30	75,840
Buena Vista	130,464	42	5,479,488	93,438	37	3,457,206	341	16	5,456	2,200	9	19,800	605	27	16,335
Butler	104,232	30	3,126,960	80,523	29	2,335,167	142	19	2,698	1,052	12	12,624	830	25	20,750
Calhoun	135,487	48	6,503,376	105,658	42	4,437,636	1,368	15	20,520	1,467	7	10,269	369	28	10,332
Carroll	113,068	44	4,974,992	70,080	39	2,733,120	3,177	16	50,832	9,852	8	78,816	2,120	30	63,600
Cass	116,010	43	4,988,430	44,017	35	1,540,595	23,768	17	404,056	10,110	9	90,990	8,579	27	231,633
Cedar	104,244	47	4,899,468	41,760	38	1,586,880	5,791	22	127,402	2,821	13	36,673	8,108	23	186,484
Cerro Gordo	95,696	38	3,636,448	76,786	30	2,303,580	95	15	1,425	4,572	10	45,720	1,779	21	37,359
Cherokee	128,066	50	6,403,300	82,957	38	3,152,366	267	10	2,670	2,042	8	16,336	1,009	29	29,261
Chickasaw	60,402	35	2,114,070	58,999	26	1,533,974	217	14	3,038	5,286	9	47,574	2,828	19	53,732
Clarke	57,012	33	1,881,396	24,914	28	697,592	19,661	16	314,576	801	8	6,408	176	20	3,520
Clay	108,892	42	4,573,464	83,111	37	3,075,107	361	13	4,693	1,357	7	9,499	1,240	26	32,240
Clayton	75,719	48	3,634,512	65,329	35	2,286,515	1,961	22	43,142	5,098	16	81,568	7,486	26	194,636
Clinton	112,337	47	5,279,839	43,762	35	1,531,670	6,401	23	147,223	5,939	12	71,280	7,507	25	187,675
Crawford	131,492	42	5,522,664	63,490	34	2,158,660	2,000	16	32,000	27,389	8	219,112	3,632	27	98,064
Dallas	124,558	48	5,978,784	60,035	37	2,221,295	24,472	19	464,968	3,834	10	38,340	827	20	16,540
Davis	49,167	37	1,819,179	25,586	33	844,338	8,549	16	136,784	2,277	6	13,662	57	18	1,026
Decatur	63,419	33	2,092,827	27,278	26	709,228	27,263	16	436,208	2,050	5	10,250	76	18	1,368
Delaware	89,448	44	3,935,712	62,267	31	1,930,277	812	19	15,428	2,298	14	32,158	7,926	23	182,298
Des Moines	53,517	46	2,461,782	25,114	28	703,192	15,327	19	291,213	1,873	11	20,603	486	19	9,234
Dickinson	60,881	40	2,435,240	50,122	33	1,654,026	103	12	1,236	3,174	8	25,392	1,619	25	40,475
Dubuque	65,970	48	3,166,560	47,717	29	1,383,793	698	18	12,564	4,990	14	69,860	4,050	20	81,000

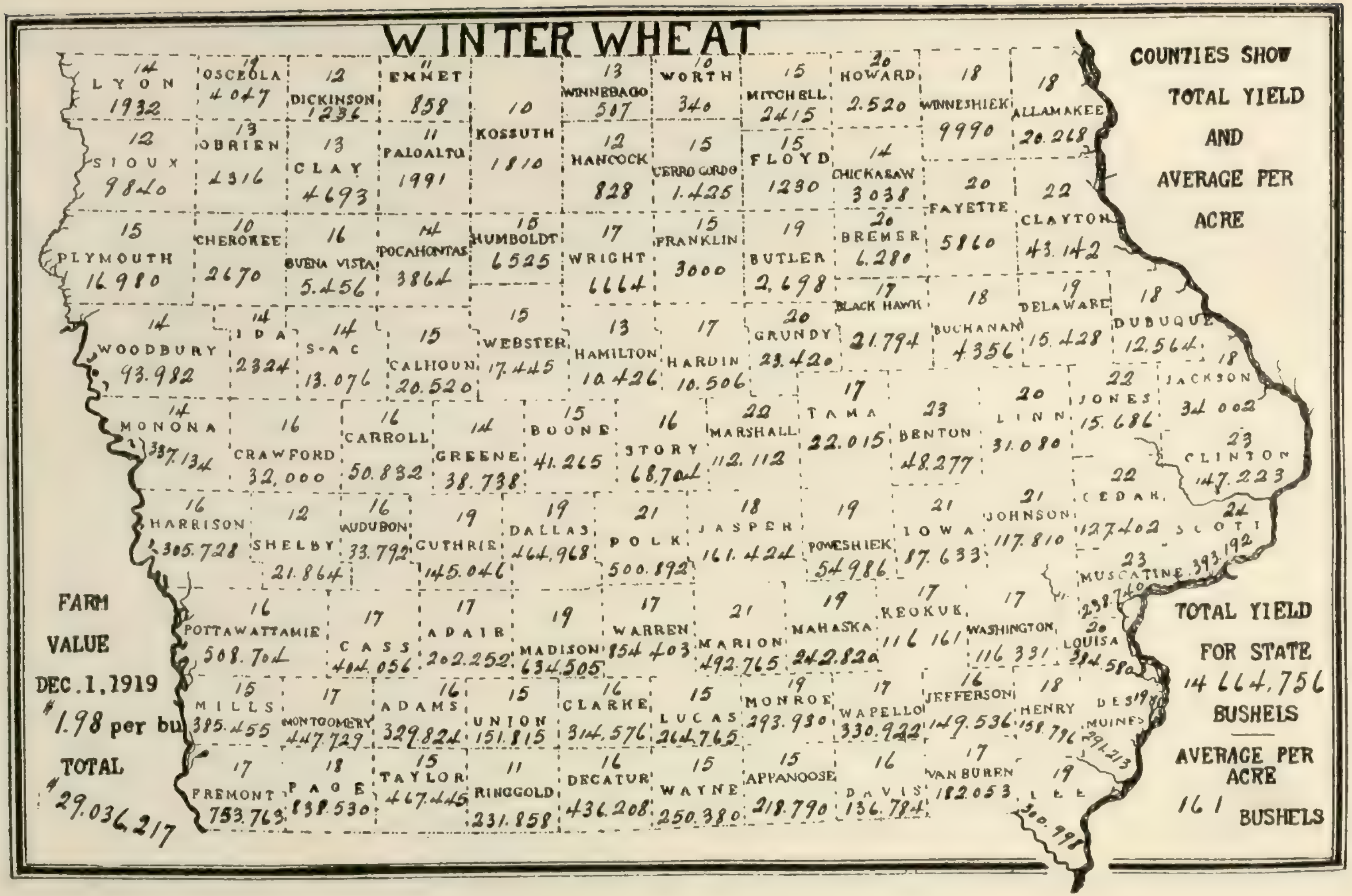
TABLE NO. 2—Continued.

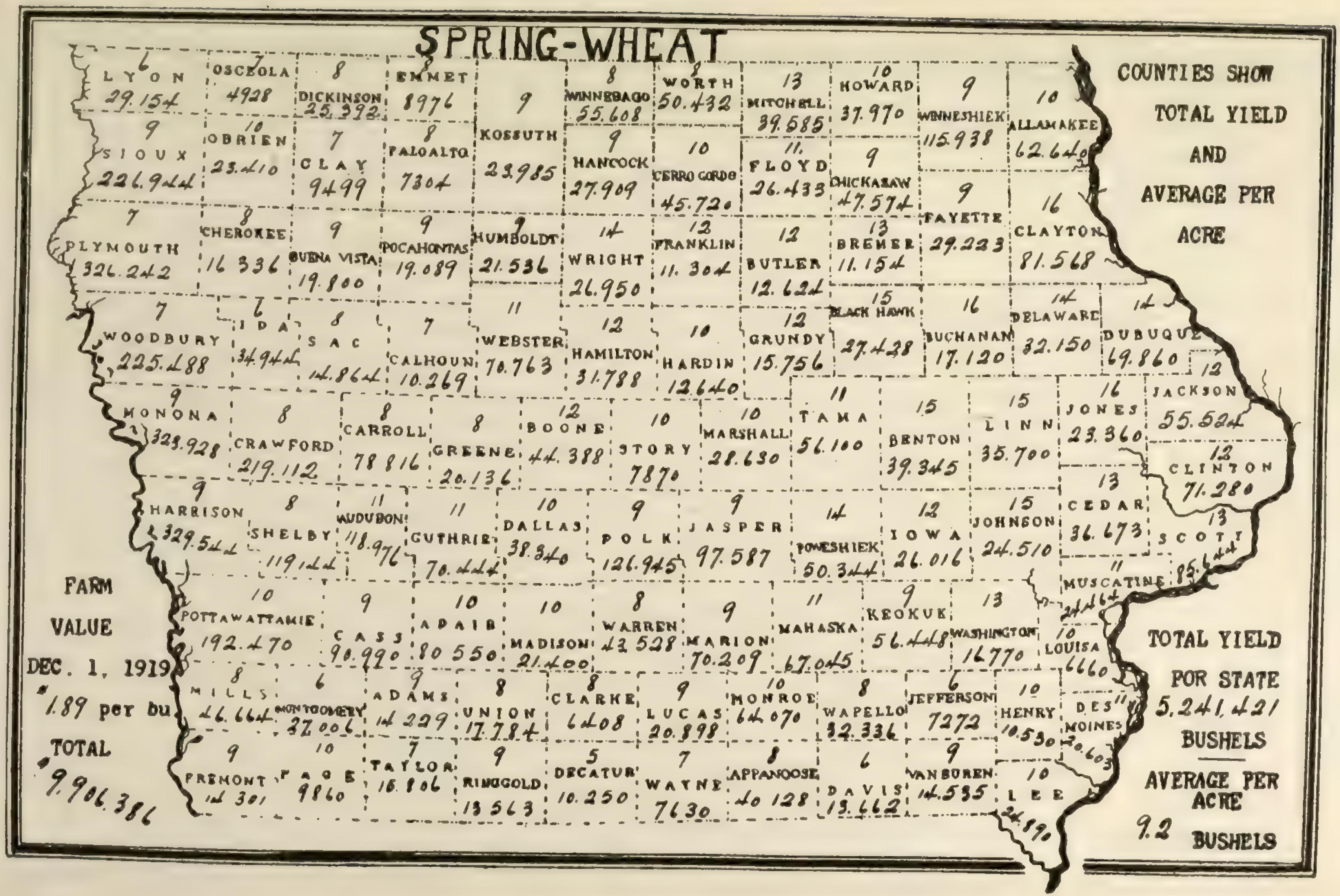
Counties	Corn			Oats			Winter Wheat			Spring Wheat			Barley		
	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels	Acres	Bushels per acre	Total bushels
Emmet	66,743	32	2,135,776	57,359	35	2,007,565	78	11	858	1,122	8	8,976	1,586	22	34,896
Fayette	93,593	44	4,118,092	76,516	35	2,678,060	293	20	5,860	3,247	9	29,223	6,026	27	162,702
Floyd	86,190	38	3,275,220	73,730	29	2,138,170	82	15	1,230	2,404	11	26,433	1,482	23	34,063
Franklin	114,258	33	3,770,514	84,671	33	2,794,143	200	15	3,000	942	12	11,304	1,304	24	31,296
Fremont	124,237	42	5,217,954	10,659	34	362,406	44,339	17	753,763	1,589	9	14,301	344	29	9,976
Greene	139,117	43	5,982,031	78,288	38	2,974,944	2,767	14	38,738	2,517	8	20,136	497	30	14,910
Grundy	103,329	38	3,926,502	76,824	34	2,612,016	1,171	20	23,420	1,313	12	15,756	1,089	28	29,403
Guthrie	108,165	39	4,218,135	52,927	34	1,799,518	7,634	19	145,046	6,404	11	70,444	1,367	29	39,643
Hamilton	131,110	45	5,899,950	97,491	41	3,997,131	802	13	10,426	2,649	12	31,788	510	24	12,240
Hancock	102,034	37	3,775,258	88,283	35	3,089,905	69	12	828	3,101	9	27,909	1,689	25	42,225
Hardin	114,604	41	4,698,764	76,703	35	2,684,605	618	17	10,506	1,264	10	12,640	1,105	27	29,835
Harrison	145,253	39	5,664,867	31,268	34	1,063,112	19,108	16	305,728	36,616	9	329,544	2,159	27	58,293
Henry	64,979	42	2,729,118	30,412	33	1,003,596	8,822	18	158,796	1,053	10	10,530	135	25	3,375
Howard	48,039	39	1,873,521	57,840	25	1,445,975	126	20	2,520	3,798	10	37,970	3,758	26	97,708
Humboldt	97,668	40	3,906,720	71,408	38	2,713,504	435	15	6,525	2,393	9	21,537	1,637	28	45,836
Ida	91,086	46	4,189,956	55,563	40	2,222,520	166	14	2,324	5,824	6	34,944	1,907	26	49,582
Iowa	93,266	46	4,290,236	43,674	35	1,528,590	4,173	21	87,633	2,168	12	26,016	1,126	27	30,402
Jackson	63,052	44	2,774,288	29,637	36	1,070,532	1,889	18	34,002	4,627	12	55,524	2,352	26	61,152
Jasper	143,290	42	6,018,138	61,903	32	1,980,896	8,968	18	161,424	10,844	9	97,587	427	26	11,102
Jefferson	64,301	35	2,250,535	26,312	27	710,424	9,346	16	149,536	1,212	6	7,272	152	18	2,736
Johnson	99,251	45	4,466,295	44,611	37	1,650,607	5,610	21	117,810	1,634	15	24,510	1,060	26	27,560
Jones	79,803	45	3,591,135	37,269	32	1,192,608	713	22	15,686	1,460	16	23,360	4,945	25	123,625
Keokuk	99,121	43	4,262,203	43,507	34	1,479,238	6,833	17	116,161	6,272	9	56,448	463	25	11,575
Kossuth	185,763	39	7,244,757	156,071	34	5,306,414	181	10	1,810	2,665	9	23,985	4,336	25	108,400
Lee	54,635	36	1,966,860	23,605	32	755,360	15,842	19	300,998	2,489	10	24,890	411	22	9,042
Linn	113,456	46	5,218,976	62,662	36	2,255,832	1,554	20	31,080	2,380	15	35,700	2,012	25	50,300
Louisa	61,918	44	2,724,392	23,546	36	847,656	19,229	20	384,580	666	10	6,660	182	25	4,550
Lucas	49,578	36	1,784,808	24,867	25	621,675	17,651	15	264,765	2,322	9	20,898	44	27	1,188
Lyon	129,318	45	5,819,310	105,000	38	3,990,000	138	14	1,932	4,859	6	29,154	4,381	25	109,525
Madison	80,158	41	3,286,478	27,047	40	1,081,880	33,395	19	634,505	2,140	10	21,400	2,645	30	79,350
Mahaska	108,104	46	4,972,784	45,343	31	1,405,633	12,780	19	242,820	6,095	11	67,045	396	25	9,900
Marion	83,601	41	3,427,641	32,536	36	1,171,296	23,465	21	492,765	7,801	9	70,209	675	28	18,900

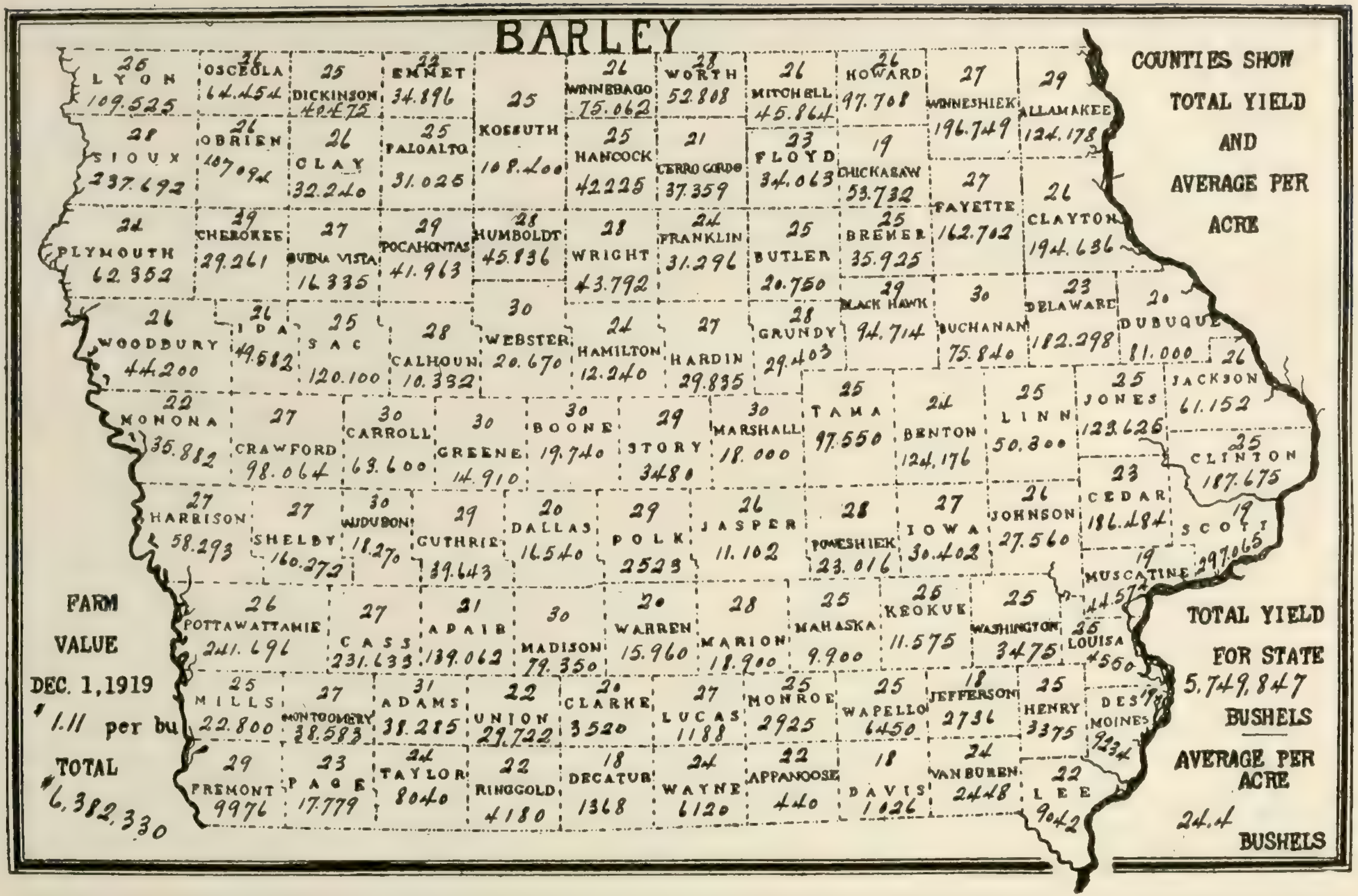
Marshall	115,831	46	5,328,226	68,986	35	2,414,510	5,096	22	112,112	2,863	10	28,630	640	30	18,000
Mills	98,080	40	3,923,200	16,503	31	511,593	25,697	15	385,455	5,833	8	46,664	880	25	22,800
Mitchell	64,755	42	2,719,710	78,552	38	2,984,976	161	15	2,415	3,045	13	39,585	1,764	26	45,864
Monona	127,032	37	4,700,184	28,961	34	984,674	24,081	14	337,13[illegible]	35,992	9	323,928	1,631	22	35,882
Monroe	41,454	37	1,533,798	14,241	25	356,025	15,470	19	293,930	6,407	10	64,070	117	25	2,925
Montgomery	83,776	41	3,434,816	21,266	34	723,044	26,337	17	447,729	4,501	6	27,006	1,429	27	38,583
Muscatine	78,283	43	3,366,169	22,436	33	749,388	10,380	23	238,740	2,224	11	24,464	2,316	19	44,574
O'Brien	110,881	44	4,878,764	89,341	39	3,484,299	332	13	4,316	2,341	10	23,410	4,119	26	107,094
Osceola	77,615	36	2,794,140	70,701	35	2,474,535	213	19	4,047	704	7	4,928	2,479	26	64,454
Page	86,784	38	3,297,792	19,137	35	669,795	46,585	18	838,530	986	10	9,860	773	23	17,779
Palo Alto	101,568	34	3,453,312	85,060	35	2,977,100	181	11	1,991	913	8	7,304	1,241	25	31,025
Plymouth	181,708	46	8,358,568	90,097	33	2,973,201	1,132	15	16,980	46,606	7	326,242	2,595	24	62,252
Pocahontas	129,624	40	5,184,960	104,345	36	3,756,420	276	14	3,864	2,121	9	19,089	1,447	29	41,963
Polk	103,556	46	4,763,576	44,031	35	1,541,085	23,852	21	500,892	14,105	9	126,945	87	29	2,523
Pottawattamie	190,211	40	7,608,440	51,573	39	2,011,347	31,794	16	508,704	19,247	10	192,470	9,296	26	241,696
Poweshiek	111,848	45	5,033,160	55,179	35	1,931,265	2,894	19	54,986	3,596	14	50,344	822	28	23,016
Ringgold	73,995	36	2,663,820	35,846	28	1,003,688	21,078	11	231,858	1,507	9	13,563	190	22	4,180
Sac	116,818	45	5,256,810	79,828	38	3,033,464	934	14	13,076	1,858	8	14,864	4,504	25	120,100
Scott	72,892	48	3,498,816	24,458	30	733,740	16,383	24	393,192	6,588	13	85,644	15,655	19	297,665
Shelby	122,746	42	5,155,332	58,113	36	2,092,068	1,822	12	21,864	14,893	8	119,144	5,936	27	160,272
Sioux	173,574	51	8,852,274	110,898	38	4,214,124	820	12	9,840	25,216	9	226,944	8,489	28	237,692
Story	140,249	42	5,890,458	80,491	34	2,736,694	4,294	16	68,704	787	10	7,870	120	29	3,480
Tama	126,429	42	5,310,018	75,717	33	2,498,661	1,295	17	22,015	5,100	11	56,100	3,902	25	97,550
Taylor	87,423	40	3,496,920	31,308	36	1,127,088	31,163	15	467,445	2,258	7	15,806	335	24	8,040
Union	66,727	33	2,201,991	31,104	32	995,328	10,121	15	151,815	2,223	8	17,784	1,351	22	29,722
Van Buren	52,411	35	1,834,385	23,351	30	700,530	10,709	17	182,053	1,615	9	14,535	102	24	2,448
Wapello	56,101	44	2,468,444	19,488	29	565,152	19,466	17	330,922	4,042	8	32,336	258	25	6,450
Warren	76,098	40	3,043,920	24,189	30	725,670	50,259	17	854,403	5,441	8	43,528	798	20	15,960
Washington	96,401	44	4,241,644	42,537	29	1,233,573	6,843	17	116,331	1,290	13	16,770	139	25	3,475
Wayne	67,450	34	2,293,300	36,686	30	1,100,580	16,692	15	250,380	1,090	7	7,630	255	24	6,120
Webster	148,007	44	6,512,308	117,873	40	4,714,920	1,163	15	17,445	6,433	11	70,763	689	30	20,670
Winnebago	67,443	39	2,562,834	53,082	34	1,804,788	39	13	507	6,951	8	55,608	2,887	26	75,062
Winneshiek	79,650	48	3,823,200	70,709	36	2,545,524	555	18	9,990	12,882	9	115,938	7,287	27	196,749
Woodbury	169,629	41	6,954,789	64,038	33	2,113,254	6,713	14	93,982	31,784	7	225,488	1,700	26	44,200
Worth	53,316	37	1,972,692	57,448	30	1,723,440	34	10	340	6,304	8	50,432	1,886	28	52,808
Wright	113,763	41	4,644,283	90,347	37	3,342,839	392	17	6,664	1,925	14	26,950	1,564	28	43,792
Grand total	9,684,651	41.7	404,473,723	5,565,630	36.5	193,342,151	864,589	16.	14,664,756	569,803	9.2	5,241,421	234,779	24	5,749,847


CORN
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
45 LYON 5.819.310
36 OSCEOLA 2.794.140
40 DICKINSON 2.435.240
32 EMMET 2.135.776
39 KOSSUTH 7.244.757
39 WINNEBAGO 2.562.834
37 WORTH 1.972.692
42 MITCHELL 2.719.710
39 HOWARD 1.873.521
48 WINNESHIEK 3.823.200
50 ALLAMAKEE 2.154.65
51 SIOUX 8.852.274
44 OBRIEN 4.878.764
42 CLAY 4.573.464
34 PALOALTO 3.453.312
37 HANCOCK 3.775.258
38 CERRO GORDO 3.636.448
38 FLOYD 3.375.220
35 CHICKASAW 2.114.070
44 FAYETTE 4.118.092
48 CLAYTON 3.634.512
46 PLYMOUTH 8.358.568
50 CHEROKEE 6.403.300
42 BUENA VISTA 5.479.488
40 POCAHONTAS 5.184.960
40 HUMBOLDT 3.906.720
41 WRIGHT 4.644.283
33 FRANKLIN 3.770.514
30 BUTLER 3.126.960
36 BREMER 2.293.344
32 BLACK HAWK 3.374.668
36 BUCHANAN 3.638.268
44 DELAWARE 3.935.712
48 DUBUQUE 3.166.560
41 WOODBURY 6.954.789
46 IDA 4.189.956
45 SAC 5.256.810
48 CALHOUN 6.503.376
44 WEBSTER 6.512.308
45 HAMILTON 5.899.950
41 HARDIN 4.698.764
38 GRUNDY 3.926.502
42 TAMA 5.310.018
43 BENTON 6.041.283
46 LINN 5.218.976
45 JONES 3.591.135
44 JACKSON 2.774.288
37 MONONA 4.704.184
42 CRAWFORD 5.522.664
44 CARROLL 4.974.992
43 GREENE 5.982.131
44 BOONE 5.638.688
42 STORY 5.890.458
46 MARSHALL 5.328.226
47 CLINTON 5.279.839
47 CEDAR 4.899.468
45 JOHNSON 4.466.295
46 IOWA 4.290.236
45 POWESHIEK 5.033.160
42 JASPER 6.018.138
46 POLK 4.763.576
48 DALLAS 5.978.784
39 GUTHRIE 4.218.135
46 AUDUBON 4.312.500
42 SHELBY 5.155.332
39 HARRISON 5.664.867
48 SCOTT 3.491.816
43 MUSCATINE 3.366.16
40 POTTAWATTAMIE 7.608.440
43 CASS 4.988.430
40 ADAIR 5.484.000
41 MADISON 3.286.478
40 WARREN 3.043.920
41 MARION 3.427.641
46 MAHASKA 4.972.784
43 KEOKUK 4.262.203
44 WASHINGTON 4.241.644
44 LOUISA 2.724.39
40 MILLS 3.923.200
41 MONTGOMERY 3.424.816
34 ADAMS 2.418.012
33 UNION 2.201.991
33 CLARKE 1.881.396
36 LUCAS 1.784.908
37 MONROE 1.533.798
44 WAPELLO 2.468.444
35 JEFFERSON 2.250.535
42 HENRY 2.729.118
46 DES MOINES 2.441.75
42 FREMONT 5.217.954
38 PAGE 3.397.792
40 TAYLOR 3.496.920
36 RINGGOLD 2.662.830
33 DECATUR 2.092.827
34 WAYNE 2.293.300
37 APPANOOSE 1.661.550
37 DAVIS 1.819.179
35 VAN BUREN 1.834.395
36 LEE 4.966.16
FARM VALUE DEC. 1, 1919
$1.17 per bu.
TOTAL
$447,752,160
TOTAL YIELD FOR STATE
404,473,723
BUSHELS
AVERAGE PER ACRE
41.7
BUSHELS


OATS
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
LYON 38 3.900.000
OSCEOLA 35 2.474.535
DICKINSON 33 1.654.026
EMMET 35 2.007.565
KOSSUTH 34 5.306.444
WINNEBAGO 34 1.804.788
WORTH 30 1.723.440
MITCHELL 38 2.984.976
HOWARD 25 1.445.975
WINNESHIEK 36 2.545.524
ALLAMAKEE 39 1.545.999
SIOUX 38 4.214.124
OBRIEN 39 3.484.299
CLAY 37 3.075.107
PALOALTO 35 2.977.100
HANCOCK 35 3.089.905
CERRO GORDO 30 2.303.580
FLOYD 29 2.138.170
CHICKASAW 26 1.533.974
FAYETTE 35 2.678.060
CLAYTON 35 2.286.515
PLYMOUTH 33 2.973.201
CHEROKEE 38 3.152.366
BUENA VISTA 37 3.457.206
POCAHONTAS 36 3.756.420
HUMBOLDT 38 2.713.504
WRIGHT 37 3.342.839
FRANKLIN 33 2.794.143
BUTLER 29 2.335.167
BREMER 33 1.778.139
BLACK HAWK 37 2.486.881
BUCHANAN 37 2.604.504
DELAWARE 31 1.930.277
DUBUQUE 29 1.383.793
WOODBURY 33 2.113.254
IDA 40 2.222.520
SAC 38 3.033.460
CALHOUN 42 4.437.636
WEBSTER 40 4.714.920
HAMILTON 41 3.997.131
HARDIN 35 2.684.605
GRUNDY 34 2.612.016
JACKSON 36 1.070.532
MONONA 34 914.674
CRAWFORD 34 2.158.660
CARROLL 39 2.733.120
GREENE 38 2.974.944
BOONE 40 3.173.920
STORY 34 2.736.694
MARSHALL 35 2.414.310
TAMA 33 2.498.661
BENTON 32 2.944.032
LINN 36 2.255.832
JONES 32 1.192.608
CLINTON 35 1.531.670
HARRISON 34 1.063.112
SHELBY 36 2.092.068
AUDUBON 32 1.376.608
GUTHRIE 34 1.799.518
DALLAS 37 2.221.295
POLK 35 1.541.085
JASPER 32 1.980.896
POWESHIEK 35 1.931.265
IOWA 35 1.528.590
JOHNSON 37 1.650
CEDAR 38 1.586.880
SCOTT 30 733.740
MUSCATINE 33 710.388
POTTAWATTAMIE 39 2.011.347
CASS 35 1.540.595
ADAIR 33 1.474.440
MADISON 40 1.081.880
WARREN 30 725.670
MARION 36 1.171.296
MAHASKA 31 1.405.655
KEOKUK 34 1.479.238
WASHINGTON 29 1.222.573
LOUISA 36 847.656
MILLS 31 511.593
MONTGOMERY 34 723.044
ADAMS 37 975.098
UNION 32 995.328
CLARKE 28 697.592
LUCAS 25 621.675
MONROE 26 356.025
WAPELLO 29 565.152
JEFFERSON 27 710.424
HENRY 33 1.003.596
DES MOINES 28 703.192
FREMONT 34 362.406
PAGE 35 669.795
TAYLOR 36 1.127.088
RINGGOLD 28 1.003.688
DECATUR 26 709.228
WAYNE 30 1.104.580
APPANOOSE 30 621.120
DAVIS 33 844.338
VAN BUREN 30 700.530
LEE 32 755.360
FARM VALUE DEC. 1, 1919
$ .64 per bu.
TOTAL
$123,738,977
TOTAL YIELD FOR STATE
193,342,151
BUSHELS
AVERAGE PER ACRE
36.5
BUSHELS


WINTER WHEAT
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
14 LYON 1932
14 OSCEOLA 4047
12 DICKINSON 1236
11 EMMET 858
10 KOSSUTH 1810
13 WINNEBAGO 507
10 WORTH 340
15 MITCHELL 2415
20 HOWARD 2.520
18 WINNESHIEK 9990
18 ALLAMAKEE 20.268
12 SIOUX 9840
13 OBRIEN 4316
13 CLAY 4693
11 PALOALTO 1991
12 HANCOCK 828
15 CERRO GORDO 1.425
15 FLOYD 1230
14 CHICKASAW 3038
20 FAYETTE 5860
22 CLAYTON 43.142
15 PLYMOUTH 16980
10 CHEROKEE 2670
16 BUENA VISTA 5.456
14 POCAHONTAS 3864
15 HUMBOLDT 6525
17 WRIGHT 6664
15 FRANKLIN 3000
19 BUTLER 2,698
20 BREMER 6.280
17 BLACK HAWK 21.794
18 BUCHANAN 4356
19 DELAWARE 15.428
18 DUBUQUE 12.564
14 WOODBURY 93.982
14 IDA 2324
14 SAC 13.076
15 CALHOUN 20.520
15 WEBSTER 17.445
13 HAMILTON 10.426
17 HARDIN 10.506
20 GRUNDY 23.420
14 MONONA 337.134
16 CRAWFORD 32,000
16 CARROLL 50.832
14 GREENE 38.738
15 BOONE 41.265
16 STORY 68,704
22 MARSHALL 112.112
17 TAMA 22.015
23 BENTON 48.277
20 LINN 31.080
22 JONES 15.686
18 JACKSON 34 002
23 CLINTON 147.223
16 HARRISON 305.728
12 SHELBY 21.864
16 AUDUBON 33.792
19 GUTHRIE 145.046
19 DALLAS 464.968
21 POLK 500.892
18 JASPER 161.424
19 POWESHIEK 54986
21 IOWA 87.633
21 JOHNSON 117.810
22 CEDAR 127.402
24 SCOTT 393.192
23 MUSCATINE 238.740
16 POTTAWATTAMIE 508.704
17 CASS 404.056
17 ADAIR 202.252
19 MADISON 634.505
17 WARREN 854 403
21 MARION 492.765
19 MAHASKA 242.820
17 KEOKUK 116 161
17 WASHINGTON 116 331
20 LOUISA 344.580
15 MILLS 385.455
17 MONTGOMERY 447.729
16 ADAMS 329.824
15 UNION 151.815
16 CLARKE 314.576
15 LUCAS 264.765
19 MONROE 293.930
17 WAPELLO 330.922
16 JEFFERSON 149.536
18 HENRY 158.796
19 DES MOINES 294.213
17 FREMONT 753.763
18 PAGE 838.530
15 TAYLOR 467.445
11 RINGGOLD 231.858
16 DECATUR 436.208
15 WAYNE 250.380
15 APPANOOSE 218.790
16 DAVIS 136.784
17 VAN BUREN 182053
19 LEE 300.998
FARM VALUE DEC. 1, 1919
$1.98 per bu
TOTAL
$29.036,217
TOTAL YIELD FOR STATE
14 664,756 BUSHELS
AVERAGE PER ACRE
16 1 BUSHELS


SPRING-WHEAT
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
6 LYON 29.154
7 OSCEOLA 4928
8 DICKINSON 25.392
8 EMMET 8976
9 KOSSUTH 23.985
8 WINNEBAGO 55.608
8 WORTH 50.432
13 MITCHELL 39.585
10 HOWARD 37.970
9 WINNESHIEK 115.938
10 ALLAMAKEE 62.640
9 SIOUX 221.944
10 OBRIEN 23.410
7 CLAY 9499
8 PALOALTO 7304
9 HANCOCK 27.909
10 CERRO GORDO 45.720
11 FLOYD 26.433
9 CHICKASAW 47.574
9 FAYETTE 29.223
16 CLAYTON 81.568
7 PLYMOUTH 326.242
8 CHEROKEE 16 336
9 BUENA VISTA 19.800
9 POCAHONTAS 19.089
9 HUMBOLDT 21.536
14 WRIGHT 26.950
12 FRANKLIN 11.304
12 BUTLER 12.624
13 BREMER 11.154
15 BLACK HAWK 27.428
16 BUCHANAN 17.120
14 DELAWARE 32.150
14 DUBUQUE 69.860
7 WOODBURY 225.488
6 IDA 34.944
8 SAC 14.864
7 CALHOUN 10.269
11 WEBSTER 70.763
12 HAMILTON 31.788
10 HARDIN 12.640
12 GRUNDY 15.756
12 JACKSON 55.524
9 MONONA 323.928
8 CRAWFORD 219.112
8 CARROLL 78 816
8 GREENE 20.136
12 BOONE 44.388
10 STORY 7870
10 MARSHALL 28.630
11 TAMA 56.100
15 BENTON 39.345
15 LINN 35.700
16 JONES 23.360
12 CLINTON 71.280
9 HARRISON 329.544
8 SHELBY 119.144
11 AUDUBON 118.976
11 GUTHRIE 70.444
10 DALLAS 38.340
9 POLK 126.945
9 JASPER 97.587
14 POWESHIEK 50.344
12 IOWA 26.016
15 JOHNSON 24.510
13 CEDAR 36.673
13 SCOTT 85.644
11 MUSCATINE 24.464
10 POTTAWATTAMIE 192.470
9 CASS 90.990
10 ADAIR 80 550
10 MADISON 21.400
8 WARREN 42 528
9 MARION 70.209
11 MAHASKA 67.045
9 KEOKUK 56.448
13 WASHINGTON 16770
10 LOUISA 6660
8 MILLS 46.664
6 MONTGOMERY 27.006
9 ADAMS 14 229
8 UNION 17.784
8 CLARKE 6408
9 LUCAS 20.898
10 MONROE 64.070
8 WAPELLO 32.336
6 JEFFERSON 7272
10 HENRY 10.530
11 DES MOINES 20.603
9 FREMONT 14 301
10 PAGE 9860
7 TAYLOR 16.806
9 RINGGOLD 13 563
5 DECATUR 10.250
7 WAYNE 7630
8 APPANOOSE 40 128
6 DAVIS 13.662
9 VAN BUREN 14.535
10 LEE 24.890
FARM VALUE DEC. 1, 1919
$1.89 per bu
TOTAL
$9,906,386
TOTAL YIELD POR STATE
5,241,421
BUSHELS
AVERAGE PER ACRE
9.2 BUSHELS



BARLEY

COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE

TOTAL YIELD FOR STATE 5,749,847 BUSHELS

AVERAGE PER ACRE 24.4 BUSHELS

FARM VALUE DEC. 1, 1919 $1.11 per bu

TOTAL $6,382,330

26 LYON 109.525
26 OSCEOLA 64.454
25 DICKINSON 40.475
22 EMMET 34.896
25 KOSSUTH 108.400
26 WINNEBAGO 75.062
28 WORTH 52.808
26 MITCHELL 45.864
26 HOWARD 97.708
27 WINNESHIEK 196.749
29 ALLAMAKEE 124.178
28 SIOUX 237.692
26 OBRIEN 107.094
26 CLAY 32.240
25 PALOALTO 31.025
25 HANCOCK 42225
21 CERRO GORDO 37.359
23 FLOYD 34.063
19 CHICKASAW 53.732
27 FAYETTE 162.702
26 CLAYTON 194.636
24 PLYMOUTH 62.352
29 CHEROKEE 29.261
27 BUENA VISTA 16.335
29 POCAHONTAS 41.963
28 HUMBOLDT 45.836
28 WRIGHT 43.792
24 FRANKLIN 31.296
25 BUTLER 20.750
25 BREMER 35.925
29 BLACK HAWK 94.714
30 BUCHANAN 75.840
23 DELAWARE 182.298
20 DUBUQUE 81.000
26 WOODBURY 44.200
26 IDA 49.582
25 SAC 120.100
28 CALHOUN 10.332
30 WEBSTER 20.670
24 HAMILTON 12.240
27 HARDIN 29.835
28 GRUNDY 29.403
26 JACKSON 61.152
22 MONONA 35.882
27 CRAWFORD 98.064
30 CARROLL 63.600
30 GREENE 14.910
30 BOONE 19.740
29 STORY 3480
30 MARSHALL 18.000
25 TAMA 97.550
24 BENTON 124.176
25 LINN 50.300
25 JONES 123.626
25 CLINTON 187.675
27 HARRISON 58.293
27 SHELBY 160.272
30 AUDUBON 18.270
29 GUTHRIE 39.643
20 DALLAS 16.540
29 POLK 2523
26 JASPER 11.102
28 POWESHIEK 23.016
27 IOWA 30.402
26 JOHNSON 27.560
23 CEDAR 186.484
19 SCOTT 297.065
19 MUSCATINE 14.572
26 POTTAWATTAMIE 241.696
27 CASS 231.633
31 ADAIR 139.062
30 MADISON 79.350
20 WARREN 15.960
28 MARION 18.900
25 MAHASKA 9.900
26 KEOKUK 11.575
25 WASHINGTON 3475
26 LOUISA 4560
25 MILLS 22.800
27 MONTGOMERY 38.583
31 ADAMS 38.285
22 UNION 29.722
20 CLARKE 3520
27 LUCAS 1188
25 MONROE 2925
25 WAPELLO 6450
18 JEFFERSON 2736
25 HENRY 3375
DES MOINES 9234
29 FREMONT 9976
23 PAGE 17.779
24 TAYLOR 8040
22 RINGGOLD 4180
18 DECATUR 1368
24 WAYNE 6120
22 APPANOOSE 440
18 DAVIS 1026
24 VAN BUREN 2448
22 LEE 9042

TABLE NO. 3

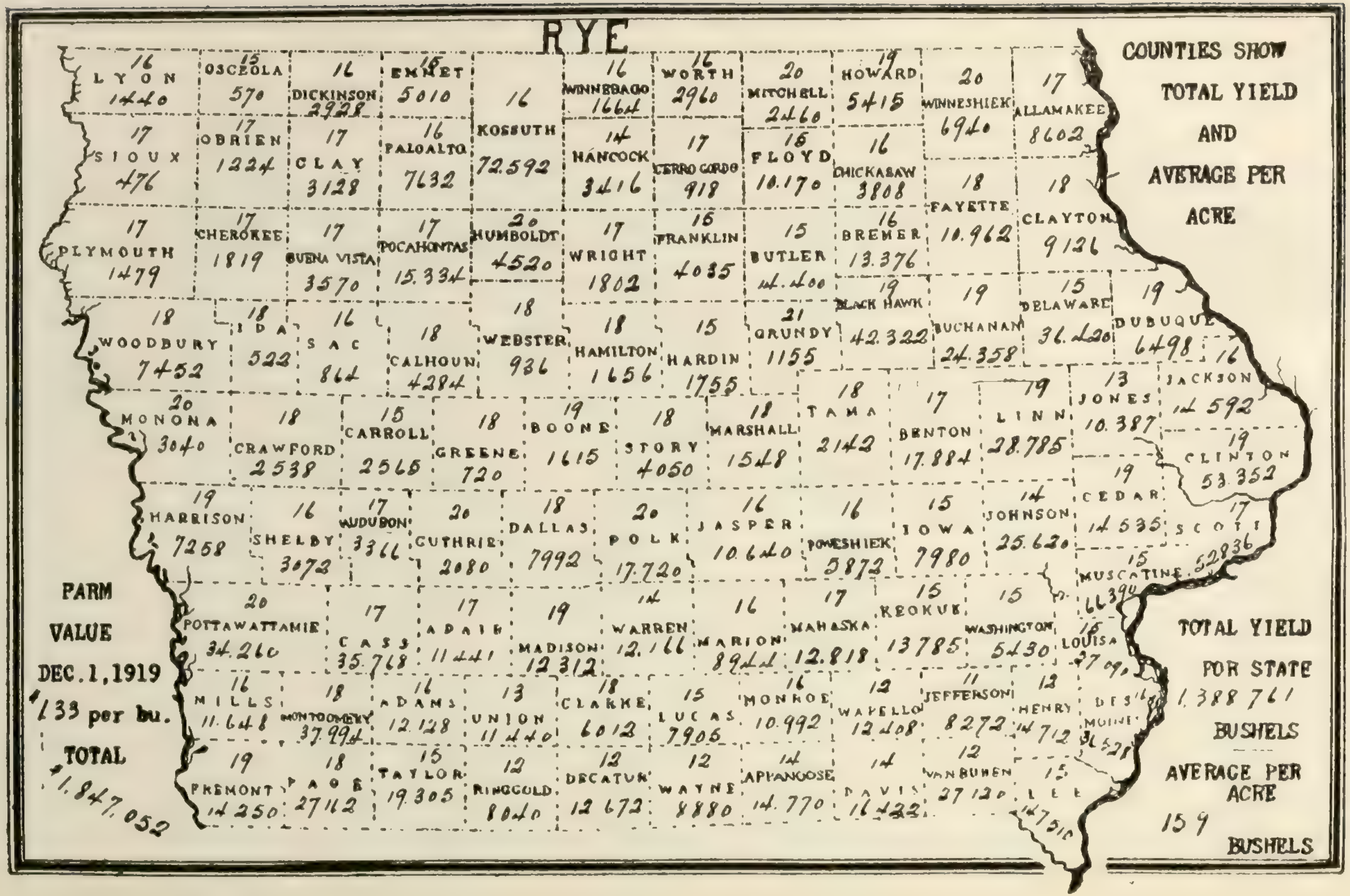
Acreage, yield per acre and total yield of rye, tame hay, wild hay ,and acreage and total yield of alfalfa and flax seed, by counties, for the year 1919.

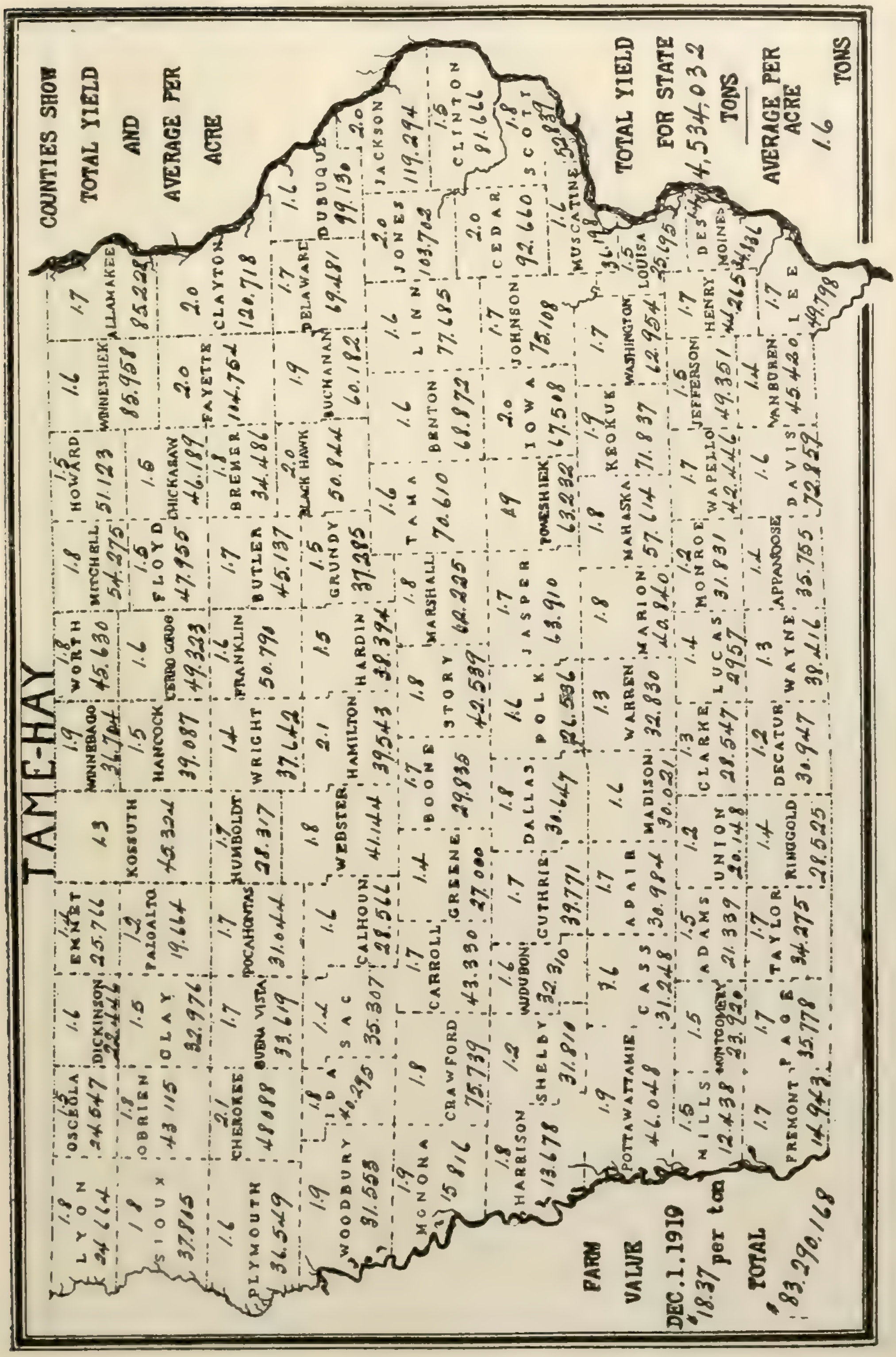
Counties	Rye			Hay (tame)			Hay (wild)			Alfalfa		Potatoes			Flax Seed	
	Acres	Bushels per acre	Total bushels	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Acres	Total tons	Acres	Bushels per acre	Total bushels	Acres	Total bushels
Adair	673	17	11,441	18,226	1.7	30,984	4,498	1.2	5,398	136	272	536	38	20,368	--------	--------
Adams	758	16	12,128	14,226	1.5	21,339	2,195	1.4	3,073	617	1,542	373	36	13,428	4	32
Allamakee	506	17	8,602	50,134	1.7	85,228	1,253	1.6	2,005	15	46	1,009	50	50,450	40	380
Appanoose	1,055	14	14,770	25,539	1.4	35,755	824	1.6	1,318	38	118	137	32	4,384	61	549
Audubon	198	17	3,366	20,194	1.6	32,310	1,759	1.2	2,111	1,260	3,906	402	25	10,050	--------	--------
Benton	1,052	17	17,884	43,045	1.6	68,872	1,916	1.0	1,916	60	186	762	30	22,860	--------	--------
Black Hawk	2,228	19	42,322	25,422	2.0	50,844	8,497	1.2	10,196	97	301	1,109	40	44,360	40	380
Boone	85	19	1,615	17,550	1.7	29,835	6,063	1.1	6,669	451	902	189	36	6,804	6	57
Bremer	836	16	13,376	19,159	1.8	34,486	20,842	1.4	29,179	75	232	1,221	26	31,746	6	57
Buchanan	1,282	19	24,358	31,675	1.9	60,182	11,618	1.6	18,589	94	291	582	36	20,952	--------	--------
Buena Vista	210	17	3,570	19,776	1.7	33,619	7,905	1.4	11,067	733	2,199	929	40	37,160	112	1,064
Butler	960	15	14,400	26,551	1.7	45,137	11,005	1.1	12,105	22	55	1,208	30	36,240	10	95
Calhoun	238	18	4,284	17,854	1.6	28,566	3,094	1.1	3,403	303	1,060	360	35	12,600	9	85
Carroll	171	15	2,565	25,488	1.7	43,330	6,670	1.4	9,338	278	778	1,384	53	73,352	7	66
Cass	2,104	17	35,768	19,530	1.6	31,248	1,126	1.2	1,351	752	1,730	704	30	21,120	--------	--------
Cedar	765	19	14,535	46,330	2.0	92,660	169	1.5	253	77	308	595	32	19,040	--------	--------
Cerro Gordo	54	17	918	30,827	1.6	49,323	9,862	1.2	1,834	34	105	1,131	53	59,943	198	1,980
Cherokee	107	17	1,819	22,899	2.1	48,088	7,724	1.5	11,586	2,473	6,182	856	52	44,512	--------	--------
Chickasaw	238	16	3,808	30,793	1.5	46,189	13,115	1.4	18,361	2	6	910	20	18,200	287	2,726
Clarke	334	18	6,012	21,959	1.3	28,547	73	1.5	109	16	48	117	30	3,510	66	627
Clay	184	17	3,128	21,984	1.5	32,976	12,297	1.2	14,756	485	1,503	419	38	15,922	326	3,097
Clayton	507	18	9,126	60,359	2.0	120,718	870	1.5	1,305	56	174	1,822	38	69,236	5	45
Clinton	2,808	19	53,352	54,444	1.5	81,666	2,007	1.2	2,408	298	894	566	34	19,244	--------	--------
Crawford	141	18	2,538	42,077	1.8	75,739	5,034	1.5	7,551	6,241	18,099	1,253	56	70,166	12	108
Dallas	444	18	7,992	17,026	1.8	30,647	1,943	1.2	2,332	609	2,010	128	36	4,608	--------	--------
Davis	1,173	14	16,422	45,537	1.6	72,859	40	1.6	64	24	43	365	44	16,060	--------	--------
Decatur	1,056	12	12,672	25,789	1.2	30,947	136	1.0	136	104	364	110	44	4,840	--------	--------
Delaware	2,428	15	36,420	40,871	1.7	69,481	5,854	1.2	7,025	36	112	778	27	21,006	--------	--------
Des Moines	2,283	16	36,528	24,883	1.4	34,836	22	2.0	44	260	1,040	601	52	31,252	17	153

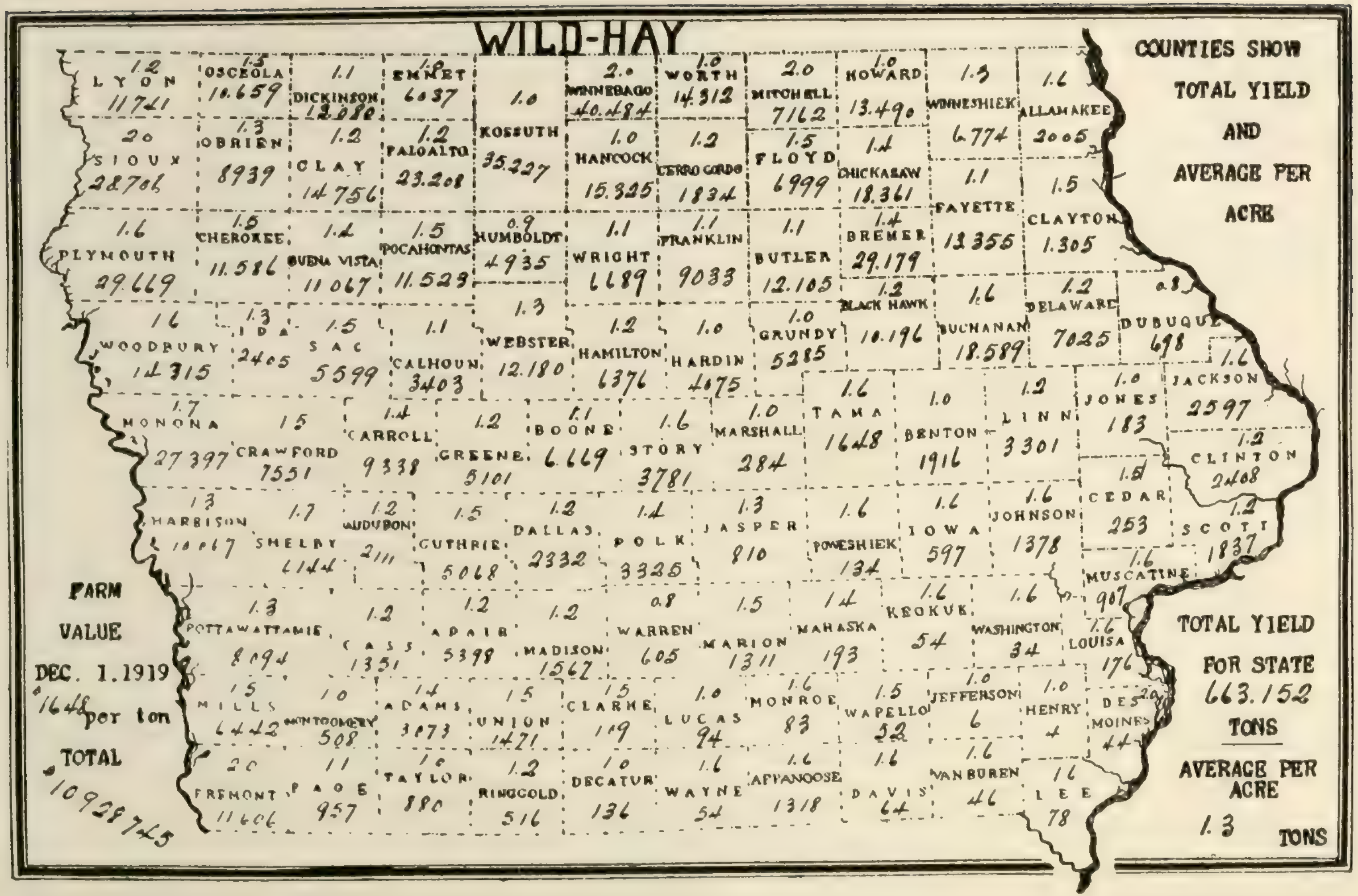
TABLE NO. 3—Continued.

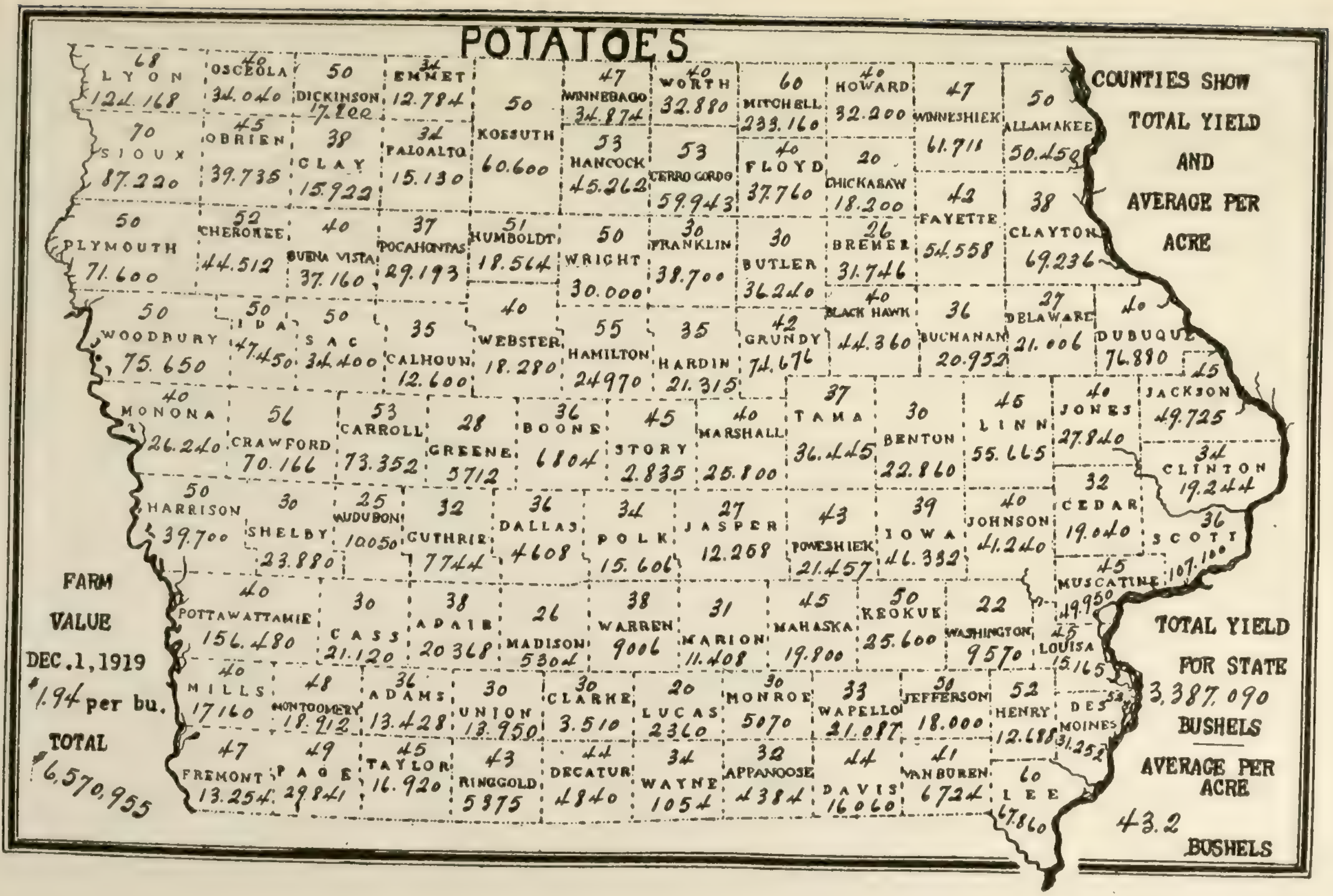
Counties	Rye			Hay (tame)			Hay (wild)			Alfalfa		Potatoes			Flax Seed	
	Acres	Bushels per acre	Total bushels	Acres	Tons per acre	Total tons	Acres	Tons per acre	Total tons	Acres	Total tons	Acres	Bushels per acre	Total bushels	Acres	Total bushels
Dickinson	183	16	2,928	14,029	1.6	22,446	11,891	1.1	13,080	156	546	356	50	17,800	383	3,830
Dubuque	342	19	6,498	61,956	1.6	99,130	872	0.8	698	83	249	1,922	40	76,880	--------	--------
Emmet	334	15	5,010	18,404	1.4	25,766	6,037	1.0	6,037	50	150	376	34	12,784	629	6,290
Fayette	609	18	10,962	52,377	2.0	104,754	12,141	1.1	13,355	7	22	1,299	42	54,558	11	104
Floyd	678	15	10,170	31,970	1.5	47,955	4,666	1.5	6,999	278	862	944	40	37,760	58	551
Franklin	269	15	4,035	31,744	1.6	50,790	8,212	1.1	9,033	18	56	1,290	30	38,700	32	304
Fremont	750	19	14,250	8,790	1.7	14,943	5,803	2.0	11,606	9,645	30,864	282	47	13,254	5	45
Greene	40	18	720	19,286	1.4	27,000	4,251	1.2	5,101	137	274	204	28	5,712	--------	--------
Grundy	55	21	1,155	24,857	1.5	37,285	5,285	1.0	5,285	18	56	1,778	42	74,676	--------	--------
Guthrie	104	20	2,080	23,395	1.7	39,771	3,379	1.5	5,068	401	1,002	242	32	7,744	--------	--------
Hamilton	92	18	1,656	18,830	2.1	39,543	5,313	1.2	6,376	135	418	454	55	24,970	33	313
Hancock	244	14	3,416	26,058	1.5	39,087	15,325	1.0	15,325	224	784	854	53	45,262	239	1,912
Hardin	117	15	1,755	25,596	1.5	38,394	4,075	1.0	4,075	68	211	609	35	21,315	20	190
Harrison	382	19	7,258	7,599	1.8	13,678	7,744	1.3	10,067	18,163	50,856	794	50	39,700	11	104
Henry	1,226	12	14,712	26,038	1.7	44,265	4	1.0	4	88	264	244	52	12,688	--------	--------
Howard	285	19	5,415	34,082	1.5	51,123	13,490	1.0	13,490	4	12	805	40	32,200	1,160	11,600
Humboldt	226	20	4,520	16,657	1.7	28,317	5,483	0.9	4,935	92	304	364	51	18,564	91	864
Ida	29	18	522	22,386	1.8	40,295	1,850	1.3	2,405	2,099	5,877	949	50	47,450	2	18
Iowa	532	15	7,980	33,754	2.0	67,508	373	1.6	597	38	118	1,188	39	46,332	--------	--------
Jackson	912	16	14,592	59,647	2.0	119,294	1,623	1.6	2,597	101	404	1,105	45	49,725	--------	--------
Jasper	665	16	10,640	37,594	1.7	63,910	623	1.3	810	118	330	454	27	12,258	--------	--------
Jefferson	752	11	8,272	32,901	1.5	49,351	6	1.0	6	19	59	360	50	18,000	--------	--------
Johnson	1,830	14	25,620	44,181	1.7	75,108	861	1.6	1,378	175	525	1,031	40	41,240	--------	--------
Jones	799	13	10,387	51,851	2.0	103,702	183	1.0	183	307	1,228	696	40	27,840	4	36
Keokuk	919	15	13,785	37,809	1.9	71,837	34	1.6	54	62	298	512	50	25,600	--------	--------
Kossuth	4,537	16	72,592	34,865	1.3	45,324	35,227	1.0	35,227	205	410	1,212	50	60,600	984	9,840
Lee	9,834	15	147,510	29,293	1.7	49,798	49	1.6	78	360	1,368	1,131	60	67,860	--------	--------
Linn	1,515	19	28,785	48,553	1.6	77,685	2,751	1.2	3,301	111	388	1,237	45	55,665	15	142
Louisa	3,806	15	57,090	17,130	1.5	25,695	110	1.6	176	44	176	337	45	15,165	--------	--------
Lucas	527	15	7,905	21,112	1.4	2,957	94	1.0	94	96	298	118	20	2,360	19	161
Lyon	90	16	1,440	13,702	1.8	24,664	9,784	1.2	11,741	2,794	7,823	1,826	68	124,168	12	114
Madison	648	19	12,312	18,763	1.6	30,021	1,306	1.2	1,567	363	980	204	26	5,304	80	760
Mahaska	754	17	12,818	32,008	1.8	57,614	138	1.4	193	112	347	410	45	19,800	1	10

Marion	559	16	8,944	22,689	1.8	40,840	874	1.5	1,311	656	2,493	368	31	11,408	--------	--------
Marshall	88	18	1,548	34,586	1.8	62,225	284	1.0	284	63	220	645	40	25,800	--------	--------
Mills	728	16	11,648	8,292	1.5	12,438	4,295	1.5	6,442	11,260	33,780	429	40	17,160	--------	--------
Mitchell	123	20	2,460	30,153	1.8	54,275	3,581	2.0	7,162	23	69	3,886	60	233,160	660	6,270
Monona	152	20	3,040	8,324	1.9	15,816	16,116	1.7	27,397	14,542	49,443	656	40	26,240	--------	--------
Monroe	687	16	10,992	26,526	1.2	31,831	52	1.6	83	31	93	169	30	5,070	54	513
Montgomery	2,108	18	37,994	15,947	1.5	23,920	508	1.0	508	3,998	11,994	394	48	18,912	15	150
Muscatine	4,426	15	66,390	22,624	1.6	36,198	567	1.6	907	468	1,310	1,110	45	49,950	--------	--------
O'Brien	72	17	1,224	23,953	1.8	43,115	6,876	1.3	8,939	1,007	4,531	883	45	39,735	76	722
Osceola	38	15	570	16,365	1.5	24,547	7,106	1.5	10,659	206	639	851	40	34,040	189	1,795
Page	1,509	18	27,162	21,046	1.7	35,778	870	1.1	957	4,739	14,691	609	49	29,841	--------	--------
Palo Alto	477	16	7,632	16,387	1.2	19,664	19,340	1.2	23,208	135	405	445	34	15,130	1,048	10,480
Plymouth	87	17	1,479	22,843	1.6	36,549	18,543	1.6	29,669	13,269	47,768	1,432	50	71,600	--------	--------
Pocahontas	902	17	15,334	18,261	1.7	31,044	7,682	1.5	11,523	201	623	789	37	29,193	87	696
Polk	886	20	17,720	16,585	1.6	26,536	2,375	1.4	3,325	497	795	459	34	15,606	60	570
Pottawattamie	1,713	20	34,260	24,236	1.9	46,048	6,226	1.3	8,094	17,929	68,130	3,912	40	156,480	25	250
Poweshiek	367	16	5,872	33,280	1.9	63,232	84	1.6	134	66	205	499	43	21,457	--------	--------
Ringgold	670	12	8,040	20,375	1.4	28,525	430	1.2	516	44	97	125	43	5,375	--------	--------
Sac	54	16	864	25,219	1.4	35,307	3,733	1.5	5,599	455	1,592	688	50	34,400	--------	--------
Scott	3,108	17	52,836	29,355	1.8	52,839	1,531	1.2	1,837	1,123	4,043	2,975	36	107,100	--------	--------
Shelby	192	16	3,072	26,508	1.2	31,810	3,614	1.7	6,144	3,084	6,168	796	30	23,880	157	1,491
Sioux	28	17	476	21,003	1.8	37,805	14,353	2.0	28,706	6,842	18,473	1,246	70	87,220	26	247
Story	225	18	4,050	23,633	1.8	42,539	2,363	1.6	3,781	138	359	63	45	2,835	15	142
Tama	119	18	2,142	44,131	1.6	70,610	1,030	1.6	1,648	75	232	985	37	36,445	201	1,708
Taylor	1,287	15	19,305	20,162	1.7	34,275	880	1.0	880	647	2,006	376	45	16,920	--------	--------
Union	880	13	11,440	16,790	1.2	20,148	981	1.5	1,471	128	320	465	30	13,950	45	450
Van Buren	2,260	12	27,120	32,443	1.4	45,420	29	1.6	46	301	813	164	41	6,724	--------	--------
Wapello	1,034	12	12,408	24,968	1.7	42,446	35	1.5	52	204	510	639	33	21,087	--------	--------
Warren	869	14	12,166	25,254	1.3	32,830	756	.8	605	256	794	237	38	9,006	281	2,388
Washington	362	15	5,430	37,032	1.7	62,954	21	1.6	34	130	403	435	22	9,570	6	60
Wayne	740	12	8,880	29,551	1.3	38,416	34	1.6	54	75	225	31	34	1,054	40	400
Webster	52	18	936	22,858	1.8	41,144	9,369	1.3	12,180	515	1,493	457	40	18,280	60	570
Winnebago	104	16	1,664	19,318	1.9	36,704	20,242	2.0	40,484	54	200	742	47	34,874	1,004	9,839
Winneshiek	347	20	6,940	53,724	1.6	85,958	5,211	1.3	6,774	5	15	1,313	47	61,711	587	4,696
Woodbury	414	18	7,452	16,607	1.9	31,553	8,947	1.6	14,315	22,222	79,999	1,513	50	75,650	69	690
Worth	185	16	2,960	25,350	1.8	45,630	14,312	1.0	14,312	20	62	822	40	32,880	1,645	13,982
Wright	106	17	1,802	26,887	1.4	37,642	6,081	1.1	6,689	54	189	600	50	30,000	27	270
Grand total	86,901	15.9	1,388,761	2,721,631	1.6	4,534,032	506,725	1.3	663,152	157,679	507,247	78,381	43.2	3,387,090	11,372	107,068


RYE
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
16 LYON 1440
15 OSCEOLA 570
16 DICKINSON 2928
16 EMMET 5010
16 KOSSUTH 72.592
16 WINNEBAGO 1664
16 WORTH 2960
20 MITCHELL 2460
19 HOWARD 5415
20 WINNESHIEK 6940
17 ALLAMAKEE 8602
17 SIOUX 476
17 OBRIEN 1224
17 CLAY 3128
16 PALOALTO 7632
14 HANCOCK 3416
17 CERRO GORDO 918
16 FLOYD 10.170
16 CHICKASAW 3808
18 FAYETTE 10.962
18 CLAYTON 9126
17 PLYMOUTH 1479
17 CHEROKEE 1819
17 BUENA VISTA 3570
17 POCAHONTAS 15.334
20 HUMBOLDT 4520
17 WRIGHT 1802
16 FRANKLIN 4035
15 BUTLER 14.400
16 BREMER 13.376
19 BLACK HAWK 42.322
19 BUCHANAN 24.358
15 DELAWARE 36.420
19 DUBUQUE 6498
18 WOODBURY 7452
18 IDA 522
16 SAC 864
18 CALHOUN 4284
18 WEBSTER 936
18 HAMILTON 1656
15 HARDIN 1755
21 GRUNDY 1155
18 TAMA 2142
17 BENTON 17.884
19 LINN 28.785
13 JONES 10.387
16 JACKSON 14 592
20 MONONA 3040
18 CRAWFORD 2538
15 CARROLL 2565
18 GREENE 720
19 BOONE 1615
18 STORY 4050
18 MARSHALL 1548
19 CLINTON 53.352
19 CEDAR 14 535
19 HARRISON 7258
16 SHELBY 3072
17 AUDUBON 3366
20 GUTHRIE 2080
18 DALLAS 7992
20 POLK 17.720
16 JASPER 10.640
16 POWESHIEK 5872
15 IOWA 7980
14 JOHNSON 25.620
17 SCOTT 52836
15 MUSCATINE 66394
20 POTTAWATTAMIE 34.260
17 CASS 35.768
17 ADAIR 11441
19 MADISON 12.312
14 WARREN 12.166
16 MARION 8944
17 MAHASKA 12.818
15 KEOKUK 13785
15 WASHINGTON 5430
16 LOUISA 27 090
16 MILLS 11.648
18 MONTGOMERY 37.994
16 ADAMS 12.128
13 UNION 11 440
18 CLARKE 6012
15 LUCAS 7905
16 MONROE 10.992
12 WAPELLO 12 408
11 JEFFERSON 8272
12 HENRY 14 712
16 DES MOINES 36 528
19 FREMONT 14 250
18 PAGE 27112
15 TAYLOR 19 305
12 RINGGOLD 8040
12 DECATUR 12 672
12 WAYNE 8880
14 APPANOOSE 14.770
14 DAVIS 16 422
12 VAN BUREN 27 120
15 LEE 147510
FARM VALUE DEC. 1, 1919
$1.33 per bu.
TOTAL
$1,847,052
TOTAL YIELD FOR STATE
1,388 761
BUSHELS
AVERAGE PER ACRE
15 9
BUSHELS


TAME-HAY
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
TOTAL YIELD FOR STATE 4,534,032 TONS
AVERAGE PER ACRE 1.6 TONS
FARM VALUE DEC. 1, 1919 $18.37 per ton
TOTAL $83,290,168
LYON 1.8 24.644
OSCEOLA 1.8 24.547
DICKINSON 1.6 22.444
EMMET 1.4 25.766
KOSSUTH 1.3 45.324
WINNEBAGO 1.9 26.704
WORTH 1.8 45.630
MITCHELL 1.8 54.275
HOWARD 1.5 51.123
WINNESHIEK 1.6 85.958
ALLAMAKEE 1.7 85.228
SIOUX 1.8 37.915
O'BRIEN 1.8 43.115
CLAY 1.5 32.976
PALO ALTO 1.2 19.664
HANCOCK 1.5 39.087
CERRO GORDO 1.6 49.323
FLOYD 1.5 47.956
CHICKASAW 1.6 46.189
FAYETTE 2.0 104.764
CLAYTON 2.0 120.718
PLYMOUTH 1.6 36.549
CHEROKEE 2.1 48.088
BUENA VISTA 1.7 33.619
POCAHONTAS 1.7 31.044
HUMBOLDT 1.7 28.317
WRIGHT 1.4 37.642
FRANKLIN 1.6 50.790
BUTLER 1.7 45.137
BREMER 1.8 34.486
DELAWARE 1.7 69.481
DUBUQUE 1.6 99.130
WOODBURY 1.9 31.553
IDA 1.8 40.295
SAC 1.4 35.307
CALHOUN 1.6 28.544
WEBSTER 1.8 41.144
HAMILTON 2.1 39.543
HARDIN 1.5 39.394
GRUNDY 1.5 37.285
BLACK HAWK 2.0 50.844
BUCHANAN 1.9 60.182
JONES 2.0 103.702
JACKSON 2.0 119.294
CLINTON 1.5 91.666
MONONA 1.9 15.816
CRAWFORD 1.8 75.739
CARROLL 1.7 43.330
GREENE 1.4 27.000
BOONE 1.7 29.936
STORY 1.8 42.589
MARSHALL 1.8 68.225
TAMA 1.6 70.610
BENTON 1.6 68.872
LINN 1.6 77.185
CEDAR 2.0 92.660
SCOTT 1.8 52.831
HARRISON 1.8 13.678
SHELBY 1.2 31.810
AUDUBON 1.6 32.310
GUTHRIE 1.7 39.771
DALLAS 1.8 30.647
POLK 1.6 26.586
JASPER 1.7 63.910
POWESHIEK 1.9 63.232
IOWA 2.0 67.508
JOHNSON 1.7 75.108
MUSCATINE 1.6 36.198
POTTAWATTAMIE 1.9 46.048
CASS 1.6 31.248
ADAIR 1.7 30.984
MADISON 1.6 30.021
WARREN 1.3 32.830
MARION 1.8 40.940
MAHASKA 1.8 57.614
KEOKUK 1.9 71.837
WASHINGTON 1.7 62.954
LOUISA 1.5 35.495
MILLS 1.5 12.438
MONTGOMERY 1.5 23.920
ADAMS 1.5 21.339
UNION 1.2 20.148
CLARKE 1.3 28.547
LUCAS 1.4 2957
MONROE 1.2 31.831
WAPELLO 1.7 42.446
JEFFERSON 1.6 49.351
HENRY 1.7 44.265
DES MOINES 34.181
FREMONT 1.7 14.943
PAGE 1.7 35.778
TAYLOR 1.7 34.275
RINGGOLD 1.4 28.525
DECATUR 1.2 30.947
WAYNE 1.3 38.416
APPANOOSE 1.4 35.755
DAVIS 1.6 72.852
VAN BUREN 1.4 45.420
LEE 1.7 49.798


WILD-HAY
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
TOTAL YIELD FOR STATE 663.152 TONS
AVERAGE PER ACRE 1.3 TONS
FARM VALUE DEC. 1.1919 16.48 per ton
TOTAL 10928745
1.2 LYON 11741
1.3 OSCEOLA 10.659
1.1 DICKINSON 12.080
1.2 EMMET 6037
1.0 KOSSUTH 35.227
2.0 WINNEBAGO 40.484
1.0 WORTH 14.312
2.0 MITCHELL 7162
1.0 HOWARD 13.490
1.3 WINNESHIEK 6.774
1.6 ALLAMAKEE 2005
20 SIOUX 28706
1.3 OBRIEN 8939
1.2 CLAY 14756
1.2 PALOALTO 23.208
1.0 HANCOCK 15.325
1.2 CERRO GORDO 1834
1.5 FLOYD 6999
1.4 CHICKASAW 18.361
1.1 FAYETTE 13.356
1.5 CLAYTON 1.305
1.6 PLYMOUTH 29.669
1.5 CHEROKEE 11.586
1.4 BUENA VISTA 11 067
1.5 POCAHONTAS 11.529
0.9 HUMBOLDT 4935
1.1 WRIGHT 6689
1.1 FRANKLIN 9033
1.1 BUTLER 12.105
1.4 BREMER 29.179
1.2 BLACK HAWK 10.196
1.6 BUCHANAN 18.589
1.2 DELAWARE 7025
0.8 DUBUQUE 698
1.6 WOODBURY 14315
1.3 IDA 2405
1.5 SAC 5599
1.1 CALHOUN 3403
1.3 WEBSTER 12.180
1.2 HAMILTON 6376
1.0 HARDIN 4075
1.0 GRUNDY 5285
1.6 TAMA 1648
1.0 BENTON 1916
1.2 LINN 3301
1.0 JONES 183
1.6 JACKSON 2597
1.7 MONONA 27397
1.5 CRAWFORD 7551
1.4 CARROLL 9338
1.2 GREENE 5101
1.1 BOONE 6.669
1.6 STORY 3781
1.0 MARSHALL 284
1.2 CLINTON 2408
1.3 HARRISON 10017
1.7 SHELBY 6144
1.2 AUDUBON 2111
1.5 GUTHRIE 5068
1.2 DALLAS 2332
1.4 POLK 3325
1.3 JASPER 810
1.6 POWESHIEK 134
1.6 IOWA 597
1.6 JOHNSON 1378
1.8 CEDAR 253
1.2 SCOTT 1837
1.6 MUSCATINE 907
1.3 POTTAWATTAMIE 8094
1.2 CASS 1351
1.2 ADAIR 5398
1.2 MADISON 1567
0.8 WARREN 605
1.5 MARION 1311
1.4 MAHASKA 193
1.6 KEOKUK 54
1.6 WASHINGTON 34
1.6 LOUISA 176
1.5 MILLS 6442
1.0 MONTGOMERY 508
1.4 ADAMS 3073
1.5 UNION 1471
1.5 CLARKE 119
1.0 LUCAS 94
1.6 MONROE 83
1.5 WAPELLO 52
1.0 JEFFERSON 6
1.0 HENRY 4
2.0 DES MOINES 44
2.0 FREMONT 11606
1.1 PAGE 957
1.0 TAYLOR 880
1.2 RINGGOLD 516
1.0 DECATUR 136
1.6 WAYNE 54
1.6 APPANOOSE 1318
1.6 DAVIS 64
1.6 VAN BUREN 46
1.6 LEE 78


POTATOES
COUNTIES SHOW TOTAL YIELD AND AVERAGE PER ACRE
68 LYON 124.168
40 OSCEOLA 34.040
50 DICKINSON 17.200
34 EMMET 12.784
50 KOSSUTH 60.600
47 WINNEBAGO 34.874
40 WORTH 32.880
60 MITCHELL 233.160
40 HOWARD 32.200
47 WINNESHIEK 61.711
50 ALLAMAKEE 50.450
70 SIOUX 87.220
45 OBRIEN 39.735
38 CLAY 15.922
34 PALOALTO 15.130
53 HANCOCK 45.262
53 CERRO GORDO 59.943
40 FLOYD 37.760
20 CHICKASAW 18.200
42 FAYETTE 54.558
38 CLAYTON 69.236
50 PLYMOUTH 71.600
52 CHEROKEE 44.512
40 BUENA VISTA 37.160
37 POCAHONTAS 29.193
51 HUMBOLDT 18.564
50 WRIGHT 30.000
30 FRANKLIN 38.700
30 BUTLER 36.240
26 BREMER 31.746
40 BLACK HAWK 44.360
36 BUCHANAN 20.952
27 DELAWARE 21.006
40 DUBUQUE 76.890
50 WOODBURY 75.650
50 IDA 47.450
50 SAC 34.400
35 CALHOUN 12.600
40 WEBSTER 18.280
55 HAMILTON 24970
35 HARDIN 21.315
42 GRUNDY 74.676
37 TAMA 36.445
30 BENTON 22.860
45 LINN 55.665
40 JONES 27.840
45 JACKSON 49.725
40 MONONA 26.240
56 CRAWFORD 70.166
53 CARROLL 73.352
28 GREENE 5712
36 BOONE 6804
45 STORY 2.835
40 MARSHALL 25.800
34 CLINTON 19.244
50 HARRISON 39.700
30 SHELBY 23.880
25 AUDUBON 10050
32 GUTHRIE 7744
36 DALLAS 4608
34 POLK 15.606
27 JASPER 12.268
43 POWESHIEK 21.457
39 IOWA 46.332
40 JOHNSON 41.240
32 CEDAR 19.040
36 SCOTT 107.100
45 MUSCATINE 49.950
40 POTTAWATTAMIE 156.480
30 CASS 21.120
38 ADAIR 20368
26 MADISON 5304
38 WARREN 9006
31 MARION 11.408
45 MAHASKA 19.800
50 KEOKUK 25.600
22 WASHINGTON 9570
45 LOUISA 15.165
40 MILLS 17160
48 MONTGOMERY 18.912
36 ADAMS 13.428
30 UNION 13.950
30 CLARKE 3.510
20 LUCAS 2360
30 MONROE 5070
33 WAPELLO 21.087
50 JEFFERSON 18.000
52 HENRY 12.688
53 DES MOINES 31.252
47 FREMONT 13.254
49 PAGE 29.841
45 TAYLOR 16.920
43 RINGGOLD 5375
44 DECATUR 4840
34 WAYNE 1054
32 APPANOOSE 4384
44 DAVIS 16060
41 VAN BUREN 6724
60 LEE 47.860
FARM VALUE DEC. 1, 1919
$1.94 per bu.
TOTAL
$6,570,955
TOTAL YIELD FOR STATE
3,387,090
BUSHELS
AVERAGE PER ACRE
43.2
BUSHELS

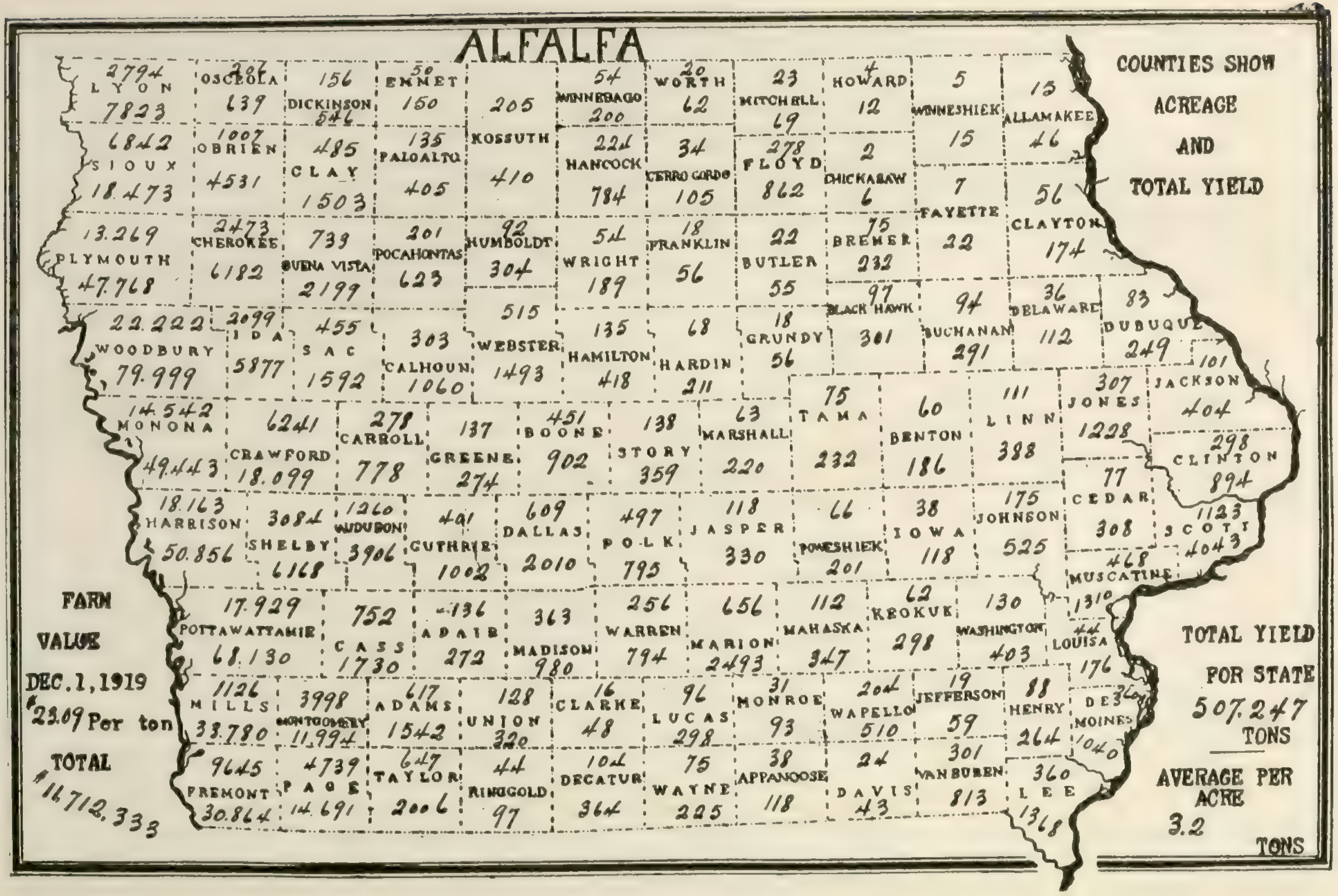

ALFALFA
COUNTIES SHOW ACREAGE AND TOTAL YIELD
2794 LYON 7823
287 OSCEOLA 639
156 DICKINSON 546
50 EMMET 150
205 KOSSUTH 410
54 WINNEBAGO 200
20 WORTH 62
23 MITCHELL 69
4 HOWARD 12
5 WINNESHIEK 15
13 ALLAMAKEE 46
6842 SIOUX 18.473
1007 OBRIEN 4531
485 CLAY 1503
135 PALOALTO 405
221 HANCOCK 784
34 CERRO GORDO 105
278 FLOYD 862
2 CHICKASAW 6
7 FAYETTE 22
56 CLAYTON 174
13.269 PLYMOUTH 47.768
2473 CHEROKEE 6182
733 BUENA VISTA 2199
201 POCAHONTAS 623
92 HUMBOLDT 304
54 WRIGHT 189
18 FRANKLIN 56
22 BUTLER 55
75 BREMER 232
97 BLACK HAWK 301
94 BUCHANAN 291
36 DELAWARE 112
83 DUBUQUE 249
22.222 WOODBURY 79.999
2099 IDA 5877
455 SAC 1592
303 CALHOUN 1060
515 WEBSTER 1493
135 HAMILTON 418
68 HARDIN 211
18 GRUNDY 56
75 TAMA 232
60 BENTON 186
111 LINN 388
307 JONES 1228
101 JACKSON 404
298 CLINTON 894
14.542 MONONA 49.443
6241 CRAWFORD 18.099
278 CARROLL 778
137 GREENE 274
451 BOONE 902
138 STORY 359
63 MARSHALL 220
77 CEDAR 308
1123 SCOTT 4043
18.163 HARRISON 50.856
3084 SHELBY 6168
1260 AUDUBON 3906
401 GUTHRIE 1002
609 DALLAS 2010
497 POLK 795
118 JASPER 330
66 POWESHIEK 201
38 IOWA 118
175 JOHNSON 525
468 MUSCATINE 1310
17.929 POTTAWATTAMIE 68.130
752 CASS 1730
136 ADAIR 272
363 MADISON 980
256 WARREN 794
656 MARION 2493
112 MAHASKA 347
62 KEOKUK 298
130 WASHINGTON 403
44 LOUISA 176
1126 MILLS 33.780
3998 MONTGOMERY 11.994
617 ADAMS 1542
128 UNION 320
16 CLARKE 48
96 LUCAS 298
31 MONROE 93
204 WAPELLO 510
19 JEFFERSON 59
88 HENRY 264
364 DES MOINES 1040
9645 FREMONT 30.864
4739 PAGE 14.691
647 TAYLOR 2006
44 RINGGOLD 97
104 DECATUR 364
75 WAYNE 225
38 APPANOOSE 118
24 DAVIS 43
301 VAN BUREN 813
360 LEE 1368
FARM VALUE DEC. 1, 1919
$23.09 Per ton
TOTAL
$11,712,333
TOTAL YIELD FOR STATE
507,247 TONS
AVERAGE PER ACRE
3.2 TONS

TABLE NO. 4

Number of horses all ages, mules all ages, Jan. 1, 1920, and number of swine July 1, 1919. Number of swine lost from hog cholera, 1919. Number dairy cows kept for milk, number other cattle, not kept for milk and total number cattle all ages. Number sheep kept on farms, number shipped in for feeding. Number pounds wool clipped. Total number all varieties poultry on farms, Jan. 1, 1920, and total number dozen eggs received by counties for the year 1919.

Counties	Horses (all ages)	Mules (all ages)	Swine on farms July 1, 1919	Swine lost by cholera 1919	Cattle			Sheep			Poultry	
					Cows and heifers kept for milk	Other cattle not kept for milk	Total cattle (all ages)	Sheep, all ages, on farms	Sheep shipped in for feeding	Total pounds wool clipped	No. all varieties on farms Jan. 1, 1920	No. dozen eggs received (estimated)
Adair	13,226	1,035	87,661	1,330	8,385	32,106	40,491	16,491	4,906	77,546	25,597	833,475
Adams	10,208	1,087	64,443	1,429	6,404	24,080	30,484	21.118	1,218	109,491	201,919	744,407
Allamakee	10,442	110	73,644	461	20,445	35,715	56,160	8,035	596	54,199	227,224	929,620
Appanoose	9,180	938	35,278	802	8,663	19,144	27,870	26,068	1,033	143,888	232,142	906,016
Audubon	11,799	539	86,823	2,327	9,319	31,493	40,812	2,889	4,3 9	9,270	229,967	909,466
Benton	17,755	659	124,954	2,680	12,253	51,746	63,996	8,336	3,659	36,987	306,552	1,028,351
Black Hawk	13,176	289	100,538	3,089	16,438	33,065	49,503	3,135	283	16,232	296,526	1,121,663
Boone	13,941	881	73,128	862	10,313	26,093	36,406	2,923	3,281	14,548	332,065	1,333,060
Bremer	9,998	101	68,996	514	21,624	21,310	42,934	2,465	158	12,639	281,100	1,113,188
Buchanan	12,785	472	101,756	1,012	14,830	34,556	49,386	6,934	142	39,822	310,692	1,234,628
Buena Vista	14,478	510	110,082	3,075	9,417	35,560	44,977	3,276	2,733	16,470	250,787	1,068,532
Butler	13,883	183	83,330	962	15,463	39,224	54,687	4,558	240	34,826	323,616	1,255,412
Calhoun	14,902	685	68,798	720	7,987	20,884	28,871	1,867	1,592	11,473	264,463	886,582
Carroll	12,763	676	108,210	3,148	11,657	33,615	45,272	8,675	5,191	23,117	300,538	975,923
Cass	14,479	1,558	101,695	3,578	7,953	33,082	41,035	17,077	12,048	102,403	248,902	978,729
Cedar	14,582	978	162,374	7,743	9,591	48,817	58,408	12,267	9,455	59,811	289,847	1,127,432
Cerro Gordo	13,081	271	74,798	1,429	14,587	34,135	48,722	3,433	436	21,149	257,879	787,050
Cherokee	13,962	428	137,798	15,995	7,116	47,087	54,203	6,029	6,187	10,101	339,567	676,153
Chickasaw	11,175	50	63,486	379	16,360	28,739	45,099	3,686	690	23,707	229,473	932,337
Clarke	8,558	799	39,900	671	5,090	31,543	36,633	11,607	3,566	53,003	191,494	746,344
Clay	12,962	279	94,522	2,253	8,821	40,691	49,512	4,072	1,146	25,468	213,612	701,530
Clayton	16,381	136	146,552	1,105	28,891	41,107	69,998	7,640	722	51,388	373,001	1,682,511
Clinton	16,737	267	149,074	2,243	15,515	51,381	66,896	5,328	5,559	19,075	328,671	1,097,567
Crawford	16,378	1,130	171,559	5,881	11,450	57,166	68,616	6,242	4,293	27,630	299,119	1,106,540
Dallas	13,481	1,360	87,976	1,707	9,116	29,023	38,139	10,914	19,002	51,562	301,360	1,252,204
Davis	9,948	871	60,642	218	8,500	19,982	28,482	68,143	1,910	403,900	281,955	1,216,724

TABLE NO. 4—Continued.

Counties	Horses (all ages)	Mules (all ages)	Swine on farms July 1, 1919	Swine lost by cholera 1919	Cattle			Sheep			Poultry	
					Cows and heifers kept for milk	Other cattle not kept for milk	Total cattle (all ages)	Sheep, all ages, on farms	Sheep shipped in for feeding	Total pounds wool clipped	No. all varieties on farms Jan. 1, 1920	No. dozen eggs received (estimated)
Decatur	11,112	1,193	49,565	203	6,991	21,767	28,758	12,822	203	70,373	261,437	1,067,971
Delaware	12,403	272	111,053	1,517	20,941	29,358	50,299	5,580	1,437	36,765	309,945	1,198,313
Des Moines	9,968	449	73,224	4,502	7,450	17,388	24,838	5,057	8,139	31,804	202,568	867,979
Dickinson	8,199	339	49,437	1,466	7,217	22,562	29,779	3,170	1,651	19,969	121,230	395,750
Dubuque	11,151	152	100,545	911	19,934	33,084	53,018	4,717	188	36,812	250,826	896,175
Emmet	7,896	198	46,667	2,126	7,441	20,977	28,418	882	1,280	5,186	119,182	441,192
Fayette	16,181	276	104,397	337	26,208	47,970	74,178	8,009	513	48,873	417,314	1,953,529
Floyd	12,031	151	66,633	531	11,572	34,945	46,517	6,030	798	43,958	255,911	969,764
Franklin	14,761	281	99,120	2,068	13,064	40,289	53,353	13,922	13,277	32,480	293,899	1,071,374
Fremont	9,481	2,297	73,693	2,779	5,596	21,000	26,596	1,636	1,667	8,273	240,905	685,700
Greene	15,371	824	83,484	2,362	7,551	28,343	35,894	5,585	3,034	23,733	273,845	1,017,664
Grundy	14,327	293	93,397	5,622	13,877	33,294	47,171	2,609	868	18,957	286,094	1,180,672
Guthrie	14,250	933	91,365	4,696	8,199	31,785	39,984	11,179	5,356	42,455	258,173	968,287
Hamilton	15,826	698	94,448	2,481	10,388	29,327	39,715	3,103	1,999	16,699	310,383	1,163,970
Hancock	12,795	292	69,044	1,554	11,987	27,129	39,116	2,804	799	14,543	237,346	822,354
Hardin	13,090	525	83,624	1,824	11,556	33,706	45,262	5,291	3,461	28,848	250,393	1,053,189
Harrison	14,678	1,992	100,351	5,467	9,851	27,202	37,053	6,097	12,581	25,127	288,420	1,106,961
Henry	10,209	847	66,620	1,018	6,350	24,401	30,751	25,219	4,932	123,376	251,377	1,059,868
Howard	5,878	204	53,134	415	15,252	31,528	46,780	5,071	233	24,968	181,188	685,215
Humboldt	10,408	348	76,820	1,970	7,928	22,150	30,078	2,516	1,066	14,855	177,824	679,375
Ida	10,846	652	111,273	5,437	5,001	34,702	39,703	2,818	13,232	8,439	183,848	647,008
Iowa	13,170	1,218	133,358	4,897	9,374	43,566	52,940	7,937	251	49,330	299,822	1,259,380
Jackson	10,645	252	94,335	244	17,700	38,839	56,539	6,432	7,944	30,065	250,525	847,368
Jasper	18,066	1,127	141,382	7,874	11,648	46,985	58,633	14,978	9,343	73,183	396,765	1,685,127
Jefferson	10,236	470	66,739	1,552	7,026	20,134	27,610	17,504	2,187	93,488	263,039	1,171,072
Johnson	15,022	1,216	148,267	6,916	10,700	40,974	51,674	10,592	1,679	69,713	318,603	1,288,239
Jones	12,359	437	110,046	1,395	16,314	42,597	58,911	5,152	1,885	29,107	268,216	1,389,276
Keokuk	15,966	1,843	113,933	6,614	8,871	29,393	38,264	12,624	2,182	73,060	346,380	1,467,805
Kossuth	22,950	444	131,490	7,344	18,733	50,456	69,189	4,369	3,458	17,530	438,692	1,662,219
Lee	10,949	656	47,063	263	9,303	21,019	30,322	25,386	928	166,003	260,136	1,108,779
Linn	15,813	709	115,383	3,811	16,801	40,728	57,529	8,366	2,099	45,408	367,885	1,480,154
Louisa	9,466	540	69,978	3,697	4,495	20,444	24,939	2,457	552	16,150	161,951	690,451
Lucas	8,991	1,061	43,991	675	6,654	22,304	28,958	18,517	4,124	91,346	192,987	882,836
Lyon	14,373	196	94,458	5,688	11,405	32,154	43,559	2,523	2,828	6,426	233,723	633,629

Madison	12,991	984	79,798	1,700	7,701	30,808	38,509	21,357	6,547	137,167	274,610	1,134,851
Mahaska	14,959	1,404	126,090	8,666	11,111	27,547	38,658	23,788	2,624	148,505	380,755	1,523,390
Marion	11,939	972	74,570	4,532	8,616	25,416	34,032	17,971	5,929	72,337	321,472	1,365,321
Marshall	15,173	714	113,377	9,079	10,860	36,759	47,619	13,145	10,025	74,803	290,524	1,095,606
Mills	10,304	1,286	79,027	6,617	6,566	22,401	28,967	7,001	12,365	11,552	276,440	631,366
Mitchell	11,111	91	61,572	84	12,295	35,088	47,383	3,553	742	18,020	209,720	910,143
Monona	13,031	1,539	91,339	5,277	8,259	25,888	34,147	576	1,770	5,222	224,425	813,213
Monroe	7,859	1,064	36,347	35	7,616	18,023	25,639	13,967	407	74,685	172,747	680,166
Montgomery	9,317	1,296	80,315	2,602	5,538	24,645	30,183	6,974	4,475	17,860	175,276	711,987
Muscatine	8,937	592	78,028	4,265	7,110	25,663	32,773	2,042	80	12,575	186,357	770,833
O'Brien	13,686	303	105,262	3,251	10,062	38,330	48,392	4,165	765	18,212	323,491	851,539
Osceola	9,064	116	56,872	2,734	8,305	21,351	29,656	6,912	2,654	24,881	141,294	526,064
Page	10,609	1,670	95,445	1,528	7,818	32,845	40,663	13,061	10,082	37,981	238,077	1,023,137
Palo Alto	12,016	309	65,442	3,123	11,289	26,728	38,017	2,362	1,158	16,430	215,605	660,030
Plymouth	20,376	699	185,276	19,067	12,246	64,611	76,857	4,725	1,755	19,415	351,522	1,092,634
Pocahontas	14,391	661	84,610	3,283	9,389	23,616	33,005	3,637	947	19,653	283,828	876,700
Polk	12,846	1,025	62,490	3,706	10,253	20,163	30,416	5,320	6,158	31,989	277,571	1,017,423
Pottawattamie	21,074	2,233	184,113	6,991	13,528	54,469	67,997	12,161	14,169	33,942	397,856	1,556,003
Poweshiek	14,799	1,136	121,533	1,317	8,876	41,140	50,016	7,902	6,061	42,290	287,390	1,161,124
Ringgold	12,256	1,271	52,539	244	8,024	23,364	31,388	15,350	1,122	82,130	279,670	1,204,876
Sac	13,713	868	107,290	3,519	7,390	34,612	42,002	6,689	4,949	21,828	256,375	896,657
Scott	11,519	587	107,190	13,937	14,487	29,945	44,432	2,703	710	11,742	281,519	1,192,089
Shelby	15,031	939	134,525	3,922	8,410	47,749	56,159	3,828	6,451	14,116	268,053	1,067,937
Sioux	18,984	311	165,704	8,363	15,343	54,126	69,496	5,353	4,246	10,725	377,775	1,228,050
Story	14,915	856	79,959	3,938	9,875	29,548	39,423	3,428	4,462	16,844	350,458	1,331,213
Tama	16,925	670	139,115	5,109	11,670	55,066	66,736	11,572	3,944	59,240	365,539	1,437,458
Taylor	12,860	1,254	83,966	1,304	7,408	25,012	32,420	24,041	3,950	129,793	278,745	1,088,703
Union	9,952	833	51,746	576	9,328	21,080	30,408	11,246	1,420	48,321	256,407	456,899
Van Buren	9,717	1,055	53,015	479	7,642	19,798	27,440	43,048	1,397	283,120	269,814	1,384,719
Wapello	8,904	805	56,434	2,779	7,858	13,690	21,548	16,218	902	97,542	205,225	770,606
Warren	13,522	950	77,653	2,552	8,791	29,485	38,276	11,066	5,579	59,828	280,345	1,123,265
Washington	13,008	1,079	134,570	9,197	6,957	35,967	42,924	9,247	1,232	73,070	296,210	1,244,419
Wayne	10,897	1,771	58,143	252	7,440	24,752	32,192	17,591	3,184	114,000	226,738	956,466
Webster	16,195	509	74,488	146	11,237	24,647	35,884	2,009	120	13,059	313,589	1,230,225
Winnebago	9,363	220	58,022	1,429	13,004	23,330	36,334	2,302	1,033	10,623	204,108	785,340
Winneshiek	15,654	85	120,433	612	26,936	45,475	72,411	8,382	489	56,947	325,621	1,257,760
Woodbury	19,456	1,593	138,448	12,385	10,939	44,838	55,777	10,493	8,241	37,381	291,488	1,156,482
Worth	8,948	114	49,940	881	13,299	28,630	41,929	1,592	658	10,412	180,152	797,634
Wright	14,468	565	86,414	3,677	9,847	28,827	38,674	5,221	3,888	24,777	237,409	788,210
Grand total	1,270,888	74,106	9,100,434	328,227	1,083,890	3,192,276	4,292,702	926,160	357,227	4,848,424	26,478,100	107,340,627

TABLE NO. 5

Acreage and total yield of sweet corn, pop corn, timothy and clover seed. Homes modern by counties for the year 1919.

Counties	Sweet Corn		Pop Corn		Timothy Seed		Clover Seed		Home Modern		
	Acres	Total tons green corn gathered for canning	Acres	Total pounds	Acres	Total bushels	Acres	Total bushels	Heat	Bath	Light
Adair	56	118	52	59,218	4,377	25,137	99	48	122	125	116
Adams	53	59	16	18,465	1,977	9,288	43	52	85	88	76
Allamakee	6	26	3	3,315	5,868	29,167	3,069	3,774	541	311	456
Appanoose	20	1	10	3,278	13,223	47,803	197	266	61	29	72
Audubon	414	1,339	1	30	1,154	4,899	104	166	262	208	199
Benton	2,892	6,407	9	14,200	2,346	11,715	947	1,133	470	320	291
Black Hawk	2,857	4,353	135	97,622	1,054	5,431	325	265	444	209	252
Boone	205	409	20	31,472	105	693	313	230	350	291	334
Bremer	1,081	2,415	11	3,934	279	966	13	6	214	96	173
Buchanan	641	927	64	50,605	1,529	4,892	149	96	303	197	249
Buena Vista	873	2,224	1,134	1,786,521	98	264	78	88	305	221	233
Butler	313	475	72	17,216	1,130	5,045	36	9	141	83	116
Calhoun	788	13,819	80	9,295	120	537	45	42	245	197	163
Carroll	22	500	705	1,059,830	731	2,523	935	2,055	183	126	213
Cass	871	2,073	63	61,225	872	5,917	475	464	293	294	319
Cedar	420	1,052	48	60,445	3,546	17,973	1,372	1,064	544	347	403
Cerro Gordo	22	3	19	6,651	454	1,406	41	106	252	144	224
Cherokee	13	---	125	572,425	167	923	150	154	237	193	264
Chickasaw	1	---	14	10,508	9,168	37,436	10	3	122	83	104
Clarke	12	---	---	---	6,876	22,623	295	125	57	53	51
Clay	6	---	565	209,795	786	3,335	36	16	229	153	188
Clayton	1,161	3,990	---	---	3,733	19,739	6,868	7,657	385	267	298
Clinton	12	11	60	7,850	1,571	5,376	1,370	2,080	467	229	345
Crawford	7	---	1,578	3,763,420	584	2,834	851	702	227	173	189
Dallas	839	1,635	26	21,620	139	648	369	239	322	253	259
Davis	29	72	75	60,144	15,089	46,247	951	943	146	128	186
Decatur	9	---	15	10,900	9,056	38,755	189	157	99	72	60
Delaware	492	751	7	4,050	1,650	7,460	799	877	265	131	165
Des Moines	15	9	2	964	1,250	5,753	4,390	3,028	240	137	271
Dickinson	2	---	36	10,640	674	2,558	134	97	64	39	40
Dubuque	242	366	1	40	2,041	7,900	6,263	6,164	306	139	214

Emmet	8		23	9,960	127	384			30	15	39
Fayette	533	1,533	3	1,000	6,057	25,899	514	543	387	257	318
Floyd	31	18	139	178,841	3,050	11,696	9	7	242	148	151
Franklin	1,102	2,262	2	30	286	1,735	99	56	272	149	158
Fremont	235	247	2	2,852	115	877	170	177	226	224	240
Greene	10	4	53	3,570	55	272	203	97	259	196	165
Grundy	401	854	24	34,416	599	2,877	81	3,075	364	206	361
Guthrie	34	43	348	446,155	4,543	22,061	772	389	221	179	211
Hamilton	381	96	40	10,875	312	1,323	208	230	277	221	225
Hancock	211	387	2	890	131	587			142	68	71
Hardin	55	411	292	31,294	97	251	207	118	266	187	225
Harrison	13		16	9,521	86	332	466	426	115	96	101
Henry	905	2,170	12	3,647	898	3,602	4,903	6,979	280	236	3 6
Howard	3		15	29,300	7,706	27,823			83	58	58
Humboldt	5		4	7,000	158	907	19	10	135	135	119
Ida	1		11,411	23,479,570	212	1,152	41	74	237	214	285
Iowa	389	1,755	3	169	18,586	75,583	1,181	1,251	391	250	317
Jackson	3		1	538	2,578	10,747	7,794	6,933	228	103	186
Jasper	188	95	101	181,600	847	3,430	5,289	4,762	450	330	326
Jefferson	25		5	4,975	3,194	13,981	5,908	4,398	225	142	195
Johnson	256	463	59	54,511	4,416	21,572	2,720	4,547	577	357	474
Jones	211	380	81	22,957	1,497	6,991	1,782	1,841	278	165	247
Keokuk	19	14	13	18,530	2,746	12,518	1,994	1,691	302	266	361
Kossuth	14	2	124	194,135	330	1,630	3	43	360	247	329
Lee	61	80	2	1,910	3,117	13,549	3,825	4,058	222	106	154
Linn	464	539	418	482,280	1,933	9,752	1,180	1,039	592	360	421
Louisa	976	2,114	27	3,827	1,242	5,204	686	654	250	177	177
Lucas	8	7	6	8,672	8,450	32,354	451	349	115	122	106
Lyon	2		43	20,225	139	488	6	28	167	94	195
Madison	186	400	3	3,560	2,051	10,553	1,051	795	167	143	158
Mahaska	248	670	9	4,190	472	2,531	3,814	2,979	346	238	309
Marion	566	1,152	14	260	428	1,694	2,401	2,467	73	65	119
Marshall	1,522	3,508	180	13,235	1,037	1,037	1,817	1,817	489	367	458
Mills	12		1		269	12,000	192	149	245	194	253
Mitchell	6	2	80	114,604	4,736	20,151	93	75	276	210	136
Monona	56	1,035	84	210,282	36	123	565	1,005	149	119	118
Monroe	10		4	910	2,199	8,330	565	439	59	39	35
Montgomery	153	158	2	49	276	1,619	1,185	818	163	142	137
Muscatine	84	10	82	110,630	1,319	7,196	1,128	793	342	161	248
O'Brien	10		130	101,246	724	3,659	52	157	290	166	285
Osceola			47	43,640	1,248	5,466	69	78	31	16	39
Page			6	4,912	855	4,570	1,323	1,089	293	264	200
Palo Alto			56	21,430	256	1,482	63	22	90	70	61
Plymouth	5	14	265	88,800	107	561	349	255	329	212	236
Pocahontas	16		66	19,911	144	702	4	10	249	140	163
Polk	1,517	4,804	102	62,316	154	578	1,057	814	301	200	271
Pottawattamie	59	9	2	20	819	5,090	1,246	1,504	400	390	374
Poweshiek	535	1,222	264	198,488	5,791	20,720	1,312	1,609	482	273	244
Ringgold	13		14	17,383	7,738	32,003	13	3	108	95	134
Sac	542	1,912	14,722	33,541,850	236	1,154	81	93	301	264	342
Scott	58	42	34	32,798	591	2,492	3,446	2,801	803	278	522

TABLE NO. 5—Continued.

Counties	Sweet Corn		Pop Corn		Timothy Seed		Clover Seed		Home Modern		
	Acres	Total tons green corn gathered for canning	Acres	Total pounds	Acres	Total bushels	Acres	Total bushels	Heat	Bath	Light
Shelby	220	400	14	8,510	780	3,564	1,323	964	301	264	252
Sioux			49	121,323	86	397	70	127	322	211	426
Story	2,096	4,967	30	5,004	119	495	169	157	271	188	238
Tama	718	1,305	69	1,769	2,700	11,004	2,009	2,782	431	341	241
Taylor	2		2	3,500	3,073	15,033	52	37	135	152	163
Union	10		22	311	5,714	23,904	334	200	133	101	105
Van Buren	16		1	838	4,307	17,338	3,971	4,883	144	84	98
Wapello	56	4	5	4	1,544	6,030	1,117	925	169	125	139
Warren					1,763	8,489	822	801	126	92	120
Washington	4	3	6	3,510	1,390	5,490	4,937	3,647	502	402	489
Wayne	13		8	4,045	25,852	82,938	422	389	101	92	179
Webster	10	7	4	4,700	78	303	91	106	310	170	214
Winnebago	696	1,487	2	2,620	207	603			194	78	82
Winneshiek	4	2	15	144	11,504	49,258	357	289	567	203	380
Woodbury	61		391	665,980	206	821	882	1,485	191	182	198
Worth	204	344	9	11,300	919	4,381	33	23	155	79	70
Wright	2	1	4	2,525	118	481	79	30	234	168	147
Grand total	30,628	79,957	35,013	68,506,297	257,000	1,059,363	109,927	112,498	25,855	17,622	21,427

TABLE NO. 6

Comparative Table Showing Number of Swine Lost by Cholera in Iowa by Counties in 1919, 1918, 1917, 1916, 1915 and 1913.

Counties	Swine lost by cholera, 1919	Swine lost by cholera, 1918	Swine lost by cholera, 1917	Swine lost by cholera, 1916	Swine lost by cholera, 1915	Swine lost by cholera, 1913
Adair	1,330	2,517	2,652	2,679	5,791	32,151
Adams	1,429	1,576	1,437	2,510	6,378	12,080
Allamakee	461	----------	7	17	86	993
Appanoose	802	168	587	159	803	1,933
Audubon	2,327	2,777	1,715	2,557	3,628	29,716
Benton	2,680	1,775	7,918	3,025	5,994	25,770
Black Hawk	3,089	1,436	2,375	1,061	5,422	26,480
Boone	862	1,256	774	2,765	1,706	26,810
Bremer	514	313	309	126	2,303	8,250
Buchanan	1,012	728	244	5	434	22,117
Buena Vista	3,075	4,252	1,408	5,114	3,482	68,286
Butler	962	541	277	553	1,261	37,211
Calhoun	720	1,463	1,360	1,865	1,578	23,755
Carroll	3,148	980	2,365	4,051	4,477	39,318
Cass	3,578	6,659	2,434	5,231	9,279	42,266
Cedar	7,743	4,798	4,723	5,281	12,407	42,729
Cerro Gordo	1,429	1,955	360	1,368	1,239	43,255
Cherokee	15,995	4,055	1,895	4,497	5,003	63,223
Chickasaw	379	214	----------	111	2,007	16,595
Clarke	671	304	692	537	2,818	4,918
Clay	2,253	1,714	1,912	2,420	1,453	31,875
Clayton	1,105	326	----------	654	760	1,700
Clinton	2,243	1,019	131	889	2,198	19,999
Crawford	5,881	4,963	5,343	9,354	9,648	71,865
Dallas	1,707	4,963	1,902	1,678	2,311	18,436
Davis	218	46	----------	66	1,704	280
Decatur	203	324	294	835	2,901	1,237
Delaware	1,517	1,047	2,175	374	1,255	33,348
Des Moines	4,502	1,679	988	1,731	7,180	9,353
Dickinson	1,466	509	333	731	868	17,716
Dubuque	911	1,031	927	1,557	4,257	23,299
Emmet	2,126	2,001	978	1,679	1,873	18,505
Fayette	337	197	120	351	528	6,158
Floyd	531	1,239	832	470	882	18,046
Franklin	2,068	2,520	999	896	5,690	31,367
Fremont	2,779	4,147	3,622	2,836	7,065	7,271
Greene	2,362	1,819	3,556	1,829	1,790	26,568
Grundy	5,622	1,439	2,599	1,031	2,962	23,618
Guthrie	4,696	3,677	1,630	3,460	3,050	30,932
Hamilton	2,481	3,119	3,216	2,294	2,385	35,526
Hancock	1,554	1,369	285	284	1,656	38,672
Hardin	1,824	2,039	1,777	2,292	5,707	28,015
Harrison	5,467	4,589	2,243	4,084	7,872	20,122
Henry	1,018	901	675	977	5,033	2,861
Howard	415	185	5	60	1,073	7,223
Humboldt	1,970	1,966	1,142	3,129	2,372	46,225
Ida	5,437	3,560	3,634	3,031	4,168	52,358
Iowa	4,897	2,810	2,035	4,250	8,939	3,656
Jackson	244	90	180	322	1,453	3,502
Jasper	7,874	6,139	6,400	3,207	9,380	48,499
Jefferson	1,552	1,058	129	506	3,719	3,207
Johnson	6,916	6,448	3,079	4,519	14,139	17,646
Jones	1,395	779	1,883	1,007	4,563	9,470
Keokuk	6,614	1,693	658	2,131	13,659	20,620
Kossuth	7,344	7,185	2,429	2,707	2,757	78,295
Lee	263	469	143	354	3,860	6,978
Linn	3,811	1,754	1,124	1,463	3,186	24,196
Louisa	3,697	2,382	2,167	6,320	11,129	12,665
Lucas	675	704	32	203	2,523	1,001
Lyon	5,688	3,408	5,226	4,886	5,701	70,181
Madison	1,700	6,332	1,110	1,712	6,305	16,584
Mahaska	8,666	4,054	2,791	4,311	21,574	30,899
Marion	4,532	7,531	3,159	3,063	8,491	27,030

TABLE NO. 6—Continued.

Comparative Table Showing Number of Swine Lost by Cholera in Iowa by Counties in 1919, 1918, 1917, 1916, 1915 and 1913.

Counties	Swine lost by cholera, 1919	Swine lost by cholera, 1918	Swine lost by cholera, 1917	Swine lost by cholera, 1916	Swine lost by cholera, 1915	Swine lost by cholera, 1913
Marshall	9,079	1,219	2,000	4,642	6,454	48,293
Mills	6,617	2,784	1,879	2,153	4,249	16,632
Mitchell	84	----------	234	174	1,368	13,810
Monona	5,277	2,185	1,853	1,574	4,961	37,085
Monroe	35	141	86	33	1,313	1,644
Montgomery	2,602	2,820	2,816	2,461	6,882	28,403
Muscatine	4,265	2,380	718	2,372	4,276	11,702
O'Brien	3,251	2,490	2,179	4,761	2,635	58,865
Osceola	2,734	1,036	1,066	824	399	36,620
Page	1,528	1,860	4,181	3,711	15,192	30,809
Palo Alto	3,123	2,338	2,017	3,779	1,701	46,260
Plymouth	19,067	8,050	6,748	10,610	6,875	105,055
Pocahontas	3,283	4,701	1,469	3,469	2,318	38,651
Polk	3,706	3,483	3,276	3,117	4,648	20,937
Pottawattamie	6,991	8,294	9,542	12,164	21,376	42,065
Poweshiek	1,317	2,141	1,622	2,035	8,301	24,902
Ringgold	244	157	263	135	2,066	8,625
Sac	3,519	2,051	1,601	4,966	4,691	67,715
Scott	13,937	3,320	1,098	3,104	4,061	21,860
Shelby	3,922	2,645	2,593	3,462	7,120	25,118
Sioux	8,363	12,025	6,192	13,587	11,570	123,101
Story	3,938	3,155	2,458	4,032	3,118	27,672
Tama	5,109	2,683	3,897	3,175	8,148	31,407
Taylor	1,304	1,032	1,876	760	5,031	18,062
Union	576	629	978	1,015	3,585	7,377
Van Buren	479	134	5	712	2,785	2,844
Wapello	2,779	984	1,288	1,754	6,634	7,606
Warren	2,552	783	806	848	4,486	18,270
Washington	9,197	4,158	5,597	5,917	11,696	24,433
Wayne	252	513	89	222	3,245	10,487
Webster	146	1,598	499	2,284	1,697	40,381
Winnebago	1,429	607	494	186	2,179	14,639
Winneshiek	612	104	333	2,224	1,999	3,543
Woodbury	12,385	14,749	7,707	6,624	9,819	61,998
Worth	881	137	439	317	1,503	16,427
Wright	3,677	3,568	1,616	1,134	2,216	49,718
Grand total	328,227	243,945	188,909	247,802	476,712	2,709,870

PART X

Statistical Tables of Iowa's Principal Farm Crops. Also Statistical Tables of the Principal Farm Crops and Live Stock by States, the United States and the World.

CORN CROPS—1880, 1885, 1890.

Statistics Compiled from Reports of Secretary of Iowa Agricultural Society.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1880	41	230,633,200	$ .25	$ 57,658,300	5,625,200
1885	33	224,636,522	.23	51,666,400	6,803,834
1890	28	239,675,156	.41	98,266,814	8,550,827

CORN CROP—1896-1919.

Statistics Compiled from Reports of Crop Service Division of Iowa State Department of Agriculture.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1896	39	312,692,210	$ .14	$ 43,916,900	8,043,390
1897	29	239,452,150	.17	40,706,860	8,523,522
1898	34.5	289,214,850	.23	66,519,400	8,896,286
1899	36.3	306,852,710	.23	70,429,410	8,460,521
1900	40.3	345,055,040	.27	93,164,860	8,618,660
1901	26.2	227,908,850	.50	113,954,000	8,687,480
1902	34	296,950,230	.28	82,432,700	8,700,000
1903	31	230,511,310	.36	82,984,071	7,398,320
1904	36	323,853,330	.35	113,348,665	9,000,000
1905	37.2	345,871,840	.35	121,055,144	9,285,150
1906	41	388,836,252	.33	128,155,143	9,443,960
1907	29.6	246,898,460	.44	108,635,322	8,858,000
1908	35.9	301,373,150	.51	153,955,306	8,399,610
1909	34.6	308,036,868	.51	157,098,802	8,681,850
1910	39.8	334,374,428	.36	120,374,794	8,399,712
1911	32.9	281,366,600	.54	151,937,964	8,534,500
1912	45.8	421,368,400	.36	151,698,624	9,199,610
1913	34.9	329,343,000	.59	194,311,370	9,434,500
1914	39	363,689,600	.55	200,029,280	9,324,300
1915	30.0	285,433,000	.45	128,444,850	9,556,400
1916	35	331,582,186	.81	268,581,571	9,479,030
1917	35.8	371,639,819	.97	370,490,625	10,370,727
1918	34.1	317,544,351	1.23	390,579,552	9,309,234
1919	41.6	416,622,000	1.17	487,447,740	10,000,000
Average for 24 years	35.5	316,108,559	$ .48	$ 160,010,539	8,941,865

WHEAT—1880- 1885, 1890.

Statistics Compiled from Reports of Secretary of Iowa Agricultural Society.

Year	Average yield per acre spring wheat	Average yield per acre winter wheat	Total yield spring wheat	Total yield winter wheat	Total yield all wheat	Average farm price Dec. 1st	Total farm value Dec. 1st	Acreage
1880	10.5	------	------------	------------	36,099,760	$ .82	$ 29,501,803	3,437,948
1885	12	------	------------	------------	31,776,108	.61	19,383,426	2,648,009
1890	11.7	------	------------	------------	25,114,552	.78	19,589,350	2,092,896

WHEAT—1896-1919.

Statistics Compiled from Reports of Crop Service Division of Iowa State Department of Agriculture.

Year	Average yield per acre spring wheat	Average yield per acre winter wheat	Total yield spring wheat	Total yield winter wheat	Total yield all wheat	Average farm price Dec. 1st	Total farm value Dec. 1st	Acreage
1896	13	17	7,047,235	3,351,550	10,398,785	$ .57	$ 6,020,00	739,245
1897	13.4	13	12,941,600	1,671,454	14,613,054	.74	10,813,65	1,222,974
1898	14.8	16.5	19,152,352	3,168,916	22,321,268	.53	11,602,00	1,484,682
1899	12.7	11	19,574,792	226,040	19,800,832	.58	10,701,49	1,559,931
1900	14.3	13.3	20,280,280	1,018.070	21,298,350	.60	12,799,37	1,492,630
1901	15.3	17.6	17,429,230	865,770	18,295,000	.60	10,965,000	1,188,239
1902	13	18	12,680,800	825,045	13,505,845	.53	7,062,640	1,021,281
1903	12.6	16.9	9,481,350	1,435,380	10,916,730	.67	7,167,643	837,422
1904	9.1	14.3	7,080,430	1,017,000	8,097,430	.89	7,042,809	846,070
1905	14.4	20.2	5,155,760	1,253,020	6,408,780	.72	4,614,321	420,068
1906	15	23	5,603,880	1,566,050	7,169,930	.64	4,579,697	443,810
1907	13	19.8	4,402,320	1,698,101	6,100,421	.82	4,974,302	424,407
1908	15.4	19.7	4,968,250	1,678,540	6,646,790	.86	5,716,239	408,614
1909	12.5	18.2	3,809,460	3,621,953	7,431,413	.90	6,688,272	502,762
1910	19.3	18.5	6,773,799	3,635,405	10,409,204	.86	8,951,915	546,179
1911	13.1	19.7	4,674,500	3,959,000	8,633,500	.89	7,683,715	559,272
1912	18.7	24.3	9,486,700	8,133,530	17,620,230	.77	13,554,135	840,360
1913	15.1	23.1	5,510,200	11,693,900	17,204,100	.77	13,136,953	871,040
1914	13	22	3,389,070	12,038,210	15,427,280	.95	14,862,788	799,435
1915	15.9	21.3	4,155,150	13,352,600	17,507,750	.84	14,614,535	888,960
1916	12.2	15.6	2,111,771	4,621,073	6,732,844	1.56	10,503,237	468,641
1917	19.2	14.6	3,177,908	2,211,817	5,389,725	1.95	10,509,963	315,923
1918	17.3	17.7	10,527,209	5,481,167	16,008,376	2.00	32,016,752	919,023
1919	9.5	17.4	7,145,300	16,508,600	23,654,900	1.93	46,191,645	1,700,000
Average for 24 years	17.8	18.0	5,273,309	4,376,341	12,983,022	$ .92	$ 11,782,211	854,166

OATS—1880, 1885, 1890.

Statistics Compiled from Reports of Secretary of Iowa Agricultural Society.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1880	35	42,288,800	$ .23	$ 9,496,424	1,179,680
1885	32.5	71,737,900	.21	15,064,959	2,207,320
1890	29	80,002,735	.38	30,401,039	2,758,715

OATS—1896-1919.

Statistics Compiled from Reports of Crop Service Division of Iowa State Department of Agriculture.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1896	26	73,450,000	$ .12	$ 8,814,000	2,825,000
1897	30	132,517,150	.16	21,211,380	4,405,782
1898	32	139,915,340	.21	29,383,220	4,299,243
1899	34.5	140,647,300	.19	26,722,980	4,069,557
1900	35	138,832,300	.20	27,766,460	3,991,690
1901	32	114,883,000	.35	40,209,230	3,799,220
1902	31	92,967,900	.24	22,297,000	3,770,624
1903	25.9	99,012,660	.30	29,703,798	3,822,822
1904	29.4	118,435,570	.26	30,793,284	4,018,980
1905	33.8	146,439,240	.25	36,609,810	4,177,545
1906	34	142,036,530	.27	38,349,878	4,166,800
1907	24.5	111,190,400	.39	43,364,256	4,536,170
1908	25.5	112,830,490	.43	48,517,110	4,431,650
1909	27	117,083,850	.35	40,979,348	4,312,184
1910	36	169,207,098	.27	45,685,916	4,697,749
1911	25.7	120,208,300	.41	59,285,403	4,660,500
1912	44.4	206,949,700	.27	55,876,419	4,665,100
1913	34.2	164,851,000	.34	56,049,340	4,824,400
1914	34	172,696,000	.41	70,805,360	5,154,200
1915	38.6	201,446,400	.32	64,462,848	5,214,900
1916	36.5	189,876,501	.49	93,039,485	5,199,269
1917	42.1	227,743,960	.61	138,923,815	5,410,031
1918	39.4	229,233,036	.64	146,709,144	5,822,869
1919	34.6	196,391,500	.64	125,690,560	5,670,000
Average for 24 years	32.7	148,265,842	$ .33	$ 54,218,751	4,497,761

BARLEY—1880, 1885, 1890.

Statistics Compiled from Reports of Secretary of Iowa Agricultural Society.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1880	23	4,600,000	$ .42	$ 1,932,000	200,000
1885	27	5,737,095	.33	1,893,241	212,485
1890	24	3,664,368	.47	1,722,254	152,682

BARLEY—1896-1919.

Statistics Compiled from Reports of Crop Service Division of Iowa State Department of Agriculture.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1896	29	15,881,618	$ .20	$ 3,176,320	547,642
1897	25	14,076,850	.23	3,237,670	551,867
1898	27.5	14,138,000	.30	4,209,740	509,580
1899	25.6	14,719,310	.30	4,415,570	557,598
1900	25.3	12,695,200	.33	4,189,410	501,740
1901	24.2	14,654,410	.44	6,447,940	604,610
1902	25	15,380,910	.33	5,075,710	594,070
1903	24.7	12,179,790	.37	4,506,522	493,108
1904	25	12,317,710	.34	4,188,021	493,370
1905	27.5	15,566,770	.33	5,137,034	565,700
1906	26.5	14,858,830	.36	5,349,178	558,870
1907	24.6	9,893,330	.60	5,935,998	397,210
1908	26.7	10,629,660	.50	5,314,830	307,408
1909	17.5	10,352,040	.46	4,761,938	562,622
1910	25.9	8,614,541	.56	4,824,143	324,571
1911	22.9	7,197,090	.90	6,447,381	313,147
1912	32.5	9,587,760	.50	4,793,880	294,935
1913	23.8	8,756,300	.53	4,640,839	368,600
1914	26	11,423,310	.56	5,397,053	437,400
1915	30.6	8,591,881	.51	4,381,859	280,520
1916	28.2	7,467,049	.90	6,720,344	265,048
1917	34.6	10,578,090	1.15	12,164,803	305,429
1918	28.4	15,238,139	.89	13,561,855	537,975
1919	25.5	8,022,800	1.11	8,905,308	315,000
Average for 24 years	26.3	11,782,557	$ .52	5,740,972	445,334

RYE—1880, 1885, 1890.

Statistics Compiled from Reports of Secretary of Iowa Agricultural Society.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1880	14	574,000	$ .38	$ 218,120	41,000
1885	15	1,710,000	.42	718,200	114,000
1890	16	1,608,960	.51	820,570	100,560

RYE—1896-1919.

Statistics Compiled from Reports of Crop Service Division of Iowa State Department of Agriculture.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1896	15	1,891,716	$ .25	$ 486,680	121,670
1897	15	3,490,344	.34	1,186,710	226,198
1898	16	3,370,550	.38	1,280,800	210,309
1899	16.3	2,061,160	.40	824,460	126,236
1900	15.6	1,621,130	.43	697,300	103,680
1901	15.8	859,630	.48	859,630	54,390
1902	17	882,830	.40	353,132	55,150
1903	15.6	1,923,060	.44	846,146	123,273
1904	15	1,517,090	.54	819,228	99,500
1905	18	1,283,500	.52	667,420	71,305
1906	17.5	1,093,160	.48	520,719	62,530
1907	17	900,060	.61	549,036	52,975
1908	17.1	869,072	.63	547,515	50,893
1909	13.4	556,846	.60	334,107	41,606
1910	13.8	407,058	.61	248,305	29,502
1911	16.8	486,130	.79	384,043	28,710
1912	20.7	888,530	.61	542,003	42,970
1913	18.3	1,274,500	.59	751,955	69,830
1914	19	1,369,260	.77	1,054,320	73,150
1915	18.6	1,301,140	.77	1,001,877	69,970
1916	12.5	461,210	1.15	530,392	36,886
1917	14.6	706,594	1.58	1,116,418	48,404
1918	12.4	860,393	1.48	1,273,382	69,395
1919	15.9	1,110,050	1.33	1,476,366	70,000
Average for 24 years	16.1	1,307,708	$ .67	$ 764,623	80,772

FLAX—1880, 1885, 1890.

Statistics Compiled from Reports of Secretary of Iowa Agricultural Society.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1880	10	1,034,200	$ 1.00	$ 1,034,200	103,420
1885			.94	2,563,293	
1890	10.5	2,929,081	1.10	3,276,989	283,722

FLAX—1896-1919.

Statistics Compiled from Reports of Crop Service Division of Iowa State Department of Agriculture.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1896	9.5	1,946,720	$ .95	$ 1,135,000	199,128
1897	10	2,498,600	.87	2,173,782	249,882
1898	10.5	2,376,600	.80	1,901,280	225,014
1899	11.2	1,597,790	1.04	1,661,898	142,175
1900	11.7	1,222,980	1.50	1,834,470	108,850
1901	18.8	916,890	1.29	916,890	104,140
1902	8	755,350	1.00	725,350	94,767
1903	8.7	355,160	.78	277,024	40,823
1904	11	591,140	1.15	679,811	51,370
1905	9.8	173,770	.90	156,393	17,732
1906	10.7	205,280	.97	200,091	19,160
1907	10.8	461,960	.98	408,640	42,790
1908	11.3	461,580	1.01	466,175	40,833
1909	10	173,650	1.29	223,647	17,365
1910	8.6	170,387	2.28	388,482	19,821
1911	8.5	173,710	2.00	347,420	20,205
1912	11.3	423,060	1.31	554,208	37,305
1913	10	223,490	1.36	303,946	22,255
1914	11	152,280	1.21	184,258	14,440
1915	9.5	127,701	1.57	200,491	13,455
1916	8.5	65,196	2.06	134,304	7,658
1917	9.9	82,734	2.87	237,446	8,384
1918	8.2	123,077	3.26	401,232	14,973
1919	9.5	152,275	3.90	593,872	16,000
Average for 24 years	10.2	642,974	1.51	$ 671,087	63,688

POTATOES—1880, 1885, 1890.

Statistics Compiled from Reports of Secretary of Iowa Agricultural Society.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1880	95	10,165,000	$ .35	$ 3,557,750	107,000
1885	82	12,874,000	.40	5,149,600	157,000
1890	49	8,332,352	.81	6,749,205	170,048

POTATOES—1896-1919.

Statistics Compiled from Reports of Crop Service Division of Iowa State Department of Agriculture.

Year	Average yield per acre	Total yield	Average farm value per bushel Dec. 1st	Total value	Acreage
1896	87	14,814,795	$ .21	$ 2,962,950	170,285
1897	60	10,051,910	.45	4,523,360	163,248
1898	76	12,538,410	.31	3,826,900	164,456
1899	98	15,252,934	.24	3,660,714	154,243
1900	78	10,850,900	.40	4,340,360	149,680
1901	37.4	5,098,460	.90	4,588,610	136,300
1902	91	12,051,670	.34	4,095,650	138,484
1903	53.8	6,082,694	.75	4,562,020	113,433
1904	125	14,255,680	.28	3,991,590	113,250
1905	84	9,352,190	.50	4,676,045	111,335
1906	101	11,697,500	.48	5,614,800	115,310
1907	84	9,847,430	.62	6,105,406	117,350
1908	89.9	10,658,290	.59	6,288,391	118,517
1909	90	12,427,595	.53	6,586,625	138,139
1910	75.3	9,986,881	.58	5,792,391	132,640
1911	71	9,386,390	.71	8,353,887	132,865
1912	104	12,904,500	.44	5,677,980	124,030
1913	47.3	5,532,170	.85	4,702,344	117,000
1914	87	9,540,200	.58	5,533,316	110,205
1915	93	8,002,200	.53	4,241,166	85,140
1916	46.6	4,132,494	1.75	7,231,864	88,691
1917	85.4	8,561,511	1.32	11,301,194	100,246
1918	73.3	7,082,480	1.32	9,248,874	96,656
1919	43.0	4,942,110	1.94	9,587,693	115,000
Average for 24 years	78.3	9,793,808	$ .69	$ 5,728,922	125,270

HAY—1880, 1885, 1890.

Statistics Compiled from Reports of Secretary of Iowa Agricultural Society.

Year	Average yield tame hay	Total yield—tons	Average yield wild hay	Total yield—tons	Total yield all hay tons	Average value per ton—tame hay	Average value per ton—wild hay	Total value—all hay	Acreage
*1880	------	------------	------	------------	------------	------	------	------------	----------
*1885	------	------------	------	------------	------------	------	------	------------	----------
1890	1.5	4,991,335	------	------------	------------	$ 6.84	——	$34,140,731	3,327,577

*No authentic data obtainable.

HAY—1896-1919.

Statistics Compiled from Reports of Crop Service Division of Iowa State Department of Agriculture.

Year	Average yield tame hay	Total yield—tons	Average yield wild hay	Total yield—tons	Total yield all hay—tons	Average value per ton—tame hay	Average value per ton—wild hay	Total value—all hay	Acreage
1896	1.5	3,376,440	1.5	2,325,000	5,701,440	$ 4.50	$ 3.30	$22,782,000	3,800,960
1897	1.6	3,362,287	1.3	1,939,117	5,301,404	4.50	3.70	22,304,000	3,315,972
1898	1.7	3,852,561	1.2	1,645,419	5,497,980	4.30	3.50	22,281,000	4,104,967
1899	1.5	4,852,941	1.2	1,458,195	6,311,136	5.75	4.90	29,350,000	3,742,655
1900	1.4	3,609,010	1	1,530,050	5,139,060	6.50	5.00	31,120,000	4,078,960
1901	1.4	3,711,680	1.2	1,268,700	4,980,380	8.25	6.30	38,712,000	3,608,450
1902	1.8	4,439,040	1.3	1,202,860	5,641,900	6.80	5.50	36,787,322	3,391,408
1903	1.9	5,216,404	1.3	1,191,345	6,407,749	5.75	4.95	35,891,480	3,651,894
1904	1.5	4,499,090	1.2	1,091,590	5,590,680	5.62	4.50	30,197,040	3,707,298
1905	1.8	6,477,300	1.2	1,313,310	7,790,610	5.50	4.50	41,535,045	4,692,925
1906	1.3	4,892,950	1.2	1,110,690	6,003,640	7.50	5.50	42,805,920	4,418,600
1907	1:5	5,117,878	1.3	1,172,590	6,290,468	8.50	6.75	51,316,945	4,268,730
1908	1.8	5,838,640	1.6	1,445,989	7,284,629	6.16	5.09	43,326,060	4,146,870
1909	1.7	5,828,580	1.4	1,219,630	7,048,210	7.42	5.90	50,443,781	4,299,740
1910	1.1	3,876,844	1.1	807,280	4,684,124	10.15	8.00	45,808,207	4,367,725
1911	0.8	3,246,200	0.9	683,385	3,929,585	13.44	10.28	50,653,116	4,214,540
1912	1.6	4,287,600	1.4	1,085,440	5,373,040	9.89	7.43	50,469,183	3,682,359
1913	1.5	4,010,300	1.3	910,205	4,920,505	9.93	8.80	47,832,083	3,359,365
1914	1.4	4,234,370	1.3	860,280	5,094,650	10.78	8.28	52,769,626	3,607,320
1915	1.8	5,955,080	1.3	841,463	6,796,543	8.94	7.41	59,473,633	3,870,542
1916	1.4	4,324,165	1.2	645,709	4,969,874	9.00	7.89	44,612,129	3,702,855
1917	1.1	3,209,412	1.1	598,177	3,807,589	18.82	14.79	69,248,170	3,286,061
1918	1.1	3,010,684	1.1	511,711	3,522,395	19.57	16.00	67,106,462	3,182,728
1919	1.6	4,957,370	1.3	631,693	5,589,063	18.37	16.48	101,477,188	3,470,000
Average 24 years	1.4	4,424,451	1.2	1,145,409	5,569,860	$ 8.99	$ 7.28	$45,345,932	3,832,957

CORN.

TABLE 1—Corn: Area and production in undermentioned countries, 1909-1919.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909–1913[1]	1917	1918	1919	Average 1909–1913[1]	1917	1918	1919
NORTH AMERICA	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
United States	104,229	116,730	104,467	102,075	2,708,334	3,065,233	2,502,665	2,917,450
Canada:								
Ontario	291	160	195	221	17,436	5,960	13,015	11,492
Quebec	24	74	55	44	736	1,803	1,190	1,199
Other	--------	--------	--------	--------	6	--------	--------	--------
Total	315	234	250	265	18,178	7,763	14,205	12,691
Mexico	11,554	(2)	(2)	(2)	164,657	(2)	75,985	(2)
Total	116,098	--------	--------	--------	2,891,169	--------	2,592,855	--------
SOUTH AMERICA								
Argentina	8,128	8,969	8,715	(2)	174,502	58,839	170,660	(2)
Chile	56	49	65	65	1,390	1,338	1,446	1,702
Uruguay	551	627	(2)	(2)	6,027	6,815	7,086	(2)
Total	8,735	9,645	--------	--------	181,919	66,992	179,192	--------
EUROPE								
Austria[3]	761	(2)	(2)	(2)	14,536	(2)	(2)	(2)
Hungary proper[3]	6,038	(2)	(2)	(2)	168,081	(2)	(2)	(2)
Croatia-Slavonia[3]	1,036	(2)	(2)	(2)	24,873	(2)	(2)	(2)
Bosnia-Herzegovina[3]	578	(2)	(2)	(2)	9,111	(2)	(2)	(2)
Bulgaria[3]	1,544	(2)	(2)	(2)	28,219	(2)	(2)	(2)
France[3]	1,155	847	734	756	22,229	14,904	8,743	(2)
Italy	3,931	3,572	3,459	3,583	100,349	75,452	66,925	79,000
Portugal	(2)	(2)	(2)	(2)	15,000	(2)	(2)	(2)
Roumania[3]	5,143	(2)	[4] 5,728	[4] 6,180	100,620	(2)	(2)	(2)
Russia proper[3]	3,173	(2)	(2)	(2)	56,571	(2)	(2)	(2)
Northern Caucasia[3]	750	(2)	(2)	(2)	13,651	(2)	(2)	(2)
Serbia[3]	1,445	(2)	(2)	(2)	28,128	(2)	(2)	(2)
Spain	1,134	1,175	1,169	1,195	26,548	29,369	24,141	24,533
Switzerland	(2)	5	7	6	(2)	252	358	287
Total	26,688	--------	--------	--------	607,916	--------	--------	--------
ASIA								
British India	6,340	6,544	6,274	(2)	87,240	93,760	92,680	(2)
Japan	130	138	144	136	3,637	3,791	3,757	(2)
Philippine Islands	992	1,058	1,034	(2)	7,446	13,441	11,271	(2)
Total	7,462	7,740	7,452	--------	98,323	110,992	107,708	--------
AFRICA								
Algeria	34	20	(2)	17	461	302	(2)	236
Egypt	1,857	1,685	1,800	(2)	64,220	63,757	(2)	(2)
Union of South Africa	(2)	3,150	3,300	2,950	26,498	36,516	45,143	41,289
Total	1,891	4,855	--------	--------	91,179	100,575	--------	--------
AUSTRALASIA								
Australia:								
Queensland	143	181	(2)	(2)	3,280	3,019	(2)	(2)
New South Wales	190	155	(2)	(2)	6,091	4,333	(2)	(2)
Victoria	18	23	(2)	(2)	887	1,172	(2)	(2)
Western Australia	(2)	(2)	(2)	(2)	1	1	(2)	(2)
South Australia	1	(2)	(2)	(2)	5	1	(2)	(2)
Total Australia	352	359	332	--------	10,264	8,526	8,843	--------
New Zealand	10	6	8	10	493	274	368	415
Total Australasia	362	365	340	--------	10,757	8,800	9,211	--------
Grand total	161,236	--------	--------	--------	3,881,263	--------	--------	--------

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[1] Five-year average except in a few cases where statistics for 5 years were not available.
[2] No official statistics.
[3] Old boundaries.
[4] Including Bessarabia but excluding Dobrudja.

CORN—Continued.

TABLE 2—Corn: Total production of countries named in Table 1, 1895-1916.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1895	2,834,750,000	1901	2,366,883,000	1907	3,420,321,000	1913	3,587,429,000
1896	2,964,435,000	1902	3,187,311,000	1908	3,606,931,000	1914	3,777,913,000
1897	2,587,206,000	1903	3,066,506,000	1909	3,563,226,000	1915	4,201,589,000
1898	2,682,619,000	1904	3,109,252,000	1910	4,031,630,000	1916	3,642,103,000
1899	2,724,100,000	1905	3,461,181,000	1911	3,481,007,000		
1900	2,792,561,000	1906	3,963,645,000	1912	4,371,888,000		

TABLE 3—Corn: Acreage, production, and total farm value, by States, 1918 and 1919.

State	Thousands of Acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1919	1918	1919	1918	1919	1918
Maine	20	23	1,100	1,035	2,145	1,728
New Hampshire	21	24	1,050	1,080	1,785	1,620
Vermont	40	40	2,120	1,520	3,710	2,584
Massachusetts	44	45	2,640	2,340	4,541	3,978
Rhode Island	11	13	495	572	921	1,030
Connecticut	55	56	3,300	2,800	5,940	4,788
New York	820	800	35,260	28,800	58,532	50,400
New Jersey	270	265	10,800	10,865	16,524	16,298
Pennsylvania	1,536	1,479	72,192	59,160	106,122	91,698
Delaware	230	230	6,900	7,130	10,005	9,697
Maryland	693	686	28,413	24,010	39,778	32,414
Virginia	1,600	1,600	44,800	44,800	75,712	71,680
West Virginia	735	750	24,990	23,250	40,984	41,850
North Carolina	2,900	3,030	55,100	63,630	101,935	112,625
South Carolina	2,340	2,175	37,440	36,975	73,757	72,101
Georgia	4,820	4,590	69,890	68,850	111,824	113,602
Florida	840	800	12,600	12,800	17,640	17,664
Ohio	3,700	3,600	162,800	129,600	196,988	168,480
Indiana	4,750	5,000	175,750	165,000	219,688	196,350
Illinois	8,600	9,700	301,000	344,350	391,300	413,220
Michigan	1,650	1,610	64,350	48,300	88,803	62,790
Wisconsin	1,820	1,710	85,540	68,742	106,925	89,365
Minnesota	2,950	2,780	118,000	111,200	141,600	123,432
Iowa	10,000	9,800	416,000	352,800	499,200	430,416
Missouri	5,756	6,693	155,412	133,860	214,469	191,420
North Dakota	508	484	16,764	9,196	23,470	11,955
South Dakota	3,200	3,100	91,200	105,400	108,528	115,940
Nebraska	7,030	6,954	184,186	123,086	224,707	157,550
Kansas	4,475	6,130	69,362	43,523	97,107	64,849
Kentucky	3,300	3,500	82,500	91,000	127,875	132,860
Tennessee	3,250	3,250	74,750	78,000	117,358	113,100
Alabama	4,334	4,378	62,843	63,919	99,920	94,600
Mississippi	3,980	3,900	59,700	66,300	95,520	100,113
Louisiana	1,850	1,800	32,375	28,800	48,562	46,368
Texas	6,760	6,500	202,800	65,000	239,304	114,400
Oklahoma	3,100	3,100	74,400	23,250	94,488	38,130
Arkansas	2,707	2,700	48,726	35,100	79,911	63,180
Montana	128	100	1,728	2,100	2,851	2,835
Wyoming	48	40	768	1,000	1,267	1,400
Colorado	671	610	11,206	10,675	15,913	14,411
New Mexico	240	160	7,200	4,000	10,872	7,200
Arizona	39	34	1,287	952	2,574	1,999
Utah	24	24	432	672	648	1,216
Nevada	3	2	90	64	126	134

CORN—Continued.

TABLE 3—Corn: Acreage, production, and total farm value, by States, 1918 and 1919—Continued.

States	Thousands of Acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1919	1918	1919	1918	1919	1918
Idaho	24	23	840	920	1,386	1,684
Washington	45	50	1,620	1,900	2,997	3,230
Oregon	71	44	1,860	1,364	2,883	2,114
California	87	85	2,871	2,975	5,139	5,742
United States	102,175	104,467	2,917,450	2,502,665	3,934,234	3,416,240

WHEAT.

TABLE 4—Wheat: Area and production of undermentioned countries, 1909-1919.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1917	1918	1919	Average 1909-1913[1]	1917	1918	1919
NORTH AMERICA	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
United States	47,097	45,089	59,181	73,243	686,691	636,655	921,438	940,987
Canada:								
Quebec	70	277	366	251	1,168	3,884	6,308	4,394
Ontario	850	770	714	981	18,633	16,318	15,241	20,982
Manitoba	2,861	2,449	2,984	2,880	53,174	41,040	48,191	43,206
Saskatchewan	4,894	8,273	9,249	10,587	97,954	117,921	92,493	97,933
Alberta	1,201	2,897	3,892	4,283	24,783	52,992	23,752	26,131
Other	69	90	159	149	1,407	1,588	3,090	3,715
Total Canada	9,945	14,756	17,364	19,131	197,119	233,743	189,075	196,361
Mexico	2,628	(2)	(2)	(2)	9,995	(2)	[3] 10,470	(2)
Total	59,670	--------	--------	--------	893,805	----------	1,120,983	----------
SOUTH AMERICA								
Argentina	15,799	16,089	17,875	16,976	157,347	80,115	223,636	184,268
Chile	1,021	1,272	1,302	1,313	20,316	22,498	23,120	21,591
Uruguay	734	780	976	(2)	7,314	5,390	13,060	13,044
Total	17,554	18,141	20,153	--------	184,977	108,003	259,816	218,903
EUROPE								
Austria[8]	3,011	(2)	(2)	(2)	61,075	(2)	(2)	(2)
Hungary proper[8]	8,284	(2)	(2)	(2)	156,523	[3] 115,530	(2)	(2)
Belgium	395	(2)	(2)	329	14,583	[3] 8,252	[3] 6,189	9,895
Bulgaria[8]	2,764	(2)	(2)	(2)	43,725	[3] 38,239	(2)	(2)
Denmark	123	131	140	124	4,916	4,296	6,330	(2)
Finland	(2)	(2)	(2)	(2)	129	(2)	(2)	(2)
France[8]	16,308	[4]10,357	[4]10,993	11,316	317,254	[4] 134,575	[4] 225,736	177,978
Germany[8]	4,768	[5] 3,573	[5] 3,547	(2)	152,119	[5] 81,791	[5] 90,330	(2)
Greece	(2)	(2)	(2)	937	7,200	(2)	(2)	(2)
Italy	11,746	10,437	10,798	10,571	183,260	139,999	176,368	169,563
Luxemburg	(2)	22	24	(2)	(2)	388	512	(2)
Netherlands	138	122	148	162	4,976	3,452	5,431	6,015
Norway	12	20	41	(2)	307	430	1,087	[3] 1,139
Portugal	1,180	685	(2)	(2)	8,683	5,560	[3] 8,252	(2)
Roumania	[8] 4,576	(2)	[6] 5,684	[6] 4,144	[8] 86,679	(2)	[6] 18,447	[6] 50,754
Russia proper[8]	50,388	(2)	(2)	(2)	522,794	(2)	(2)	(2)
Poland[8]	1,260	(2)	(2)	(2)	23,343	(2)	(2)	(2)

[1] Five-year average except in a few cases where statistics for 5 years were not available.
[2] No official statistics.
[3] Unofficial estimate.
[4] Excludes territory occupied by the enemy.
[5] Excludes Alsace-Lorraine.
[6] Excluding Dobrudja.
[7] Including some native States.
[8] Old boundaries.

WHEAT—Continued.

TABLE 4—Wheat: Area and production of undermentioned countries, 1909-1919 —Continued.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1917	1918	1919	Average 1909-1913[1]	1917	1918	1919
	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
Serbia[8]	874	(2)	(2)	(2)	14,775	[3] 6,189	[3] 4,126	(2)
Spain	9,547	10,340	10,228	10,388	130,446	142,674	135,709	133,939
Sweden	255	329	381	(2)	7,907	6,864	9,003	(2)
Switzerland	156	139	203	130	3,314	4,556	7,095	3,524
United Kingdom:								
England	1,748	1,855	2,461	(2)	56,411	57,397	83,957	(2)
Wales	44	64	96	(2)	1,117	1,726	2,938	(2)
Scotland	52	61	79	80	2,345	2,510	3,317	2,960
Ireland	43	124	157	(2)	1,608	4,717	5,867	(2)
Total, United Kingdom	1,887	2,104	2,793	--------	61,481	66,350	96,079	--------
Total	117,672	--------	--------	--------	1,805,489	--------	--------	--------
ASIA								
British India[7]	29,114	32,940	35,487	23,764	350,736	382,069	370,421	280,075
Cyprus	(2)	(2)	(2)	(2)	2,286	[3] 1,524	(2)	(2)
Japanese Empire:								
Japan	1,179	1,393	1,390	1,376	25,274	34,745	32,923	29,800
Formosa	14	(2)	(2)	(2)	173	(2)	(2)	(2)
Chosen (Korea)	(2)	(2)	(2)	(2)	(2)	(2)	6,655	7,144
Persia	(2)	(2)	(2)	(2)	16,000	(2)	(2)	(2)
Russia:								
Central Asia (4 governments)[8]	3,767	(2)	(2)	(2)	29,292	(3)	(2)	(2)
Siberia (4 governments)[8]	5,987	(2)	(2)	(2)	54,737	(2)	(2)	(2)
Transcaucasia (1 government)[8]	10	(2)	(2)	(2)	110	(2)	(2)	(2)
Total, Russia, Asiatic	9,764	--------	--------	--------	84,139	--------	--------	--------
Turkey (Asiatic)	(2)	(2)	(2)	(2)	35,000	(2)	(2)	(3)
Total	40,071	--------	--------	--------	513,608	--------	--------	--------
AFRICA								
Algeria	3,371	3,222	3,186	2,828	33,071	23,151	49,774	25,559
Egypt	1,311	1,116	1,286	1,323	34,000	29,834	32,555	(2)
Tunis	1,193	1,310	1,413	1,190	6,063	6,963	8,451	7,349
Union of South Africa	(2)	755	925	953	4,620	4,790	8,833	8,600
Total	5,875	6,403	6,810	6,294	77,754	64,738	99,613	--------
AUSTRALASIA								
Australia:								
Queensland	95	228	128	22	1,250	2,463	1,035	105
New South Wales	2,025	3,807	3,329	2,411	26,717	36,598	37,712	17,833
Victoria	2,105	3,126	2,690	2,214	27,656	51,162	37,738	25,240
South Australia	1,993	2,778	2,356	2,134	22,843	45,745	28,693	22,937
Western Australia	544	1,567	1,250	1,145	5,671	16,103	9,304	8,837
Tasmania	36	28	22	12	806	348	252	187
Other	(2)	1	(2)	52	(2)	14	(2)	(2)
Total, Australia	6,798	11,535	9,775	7,990	84,943	152,433	114,734	75,139
New Zealand	258	218	281	209	7,885	5,051	6,808	6,659
Total, Australasia	7,056	11,753	10,056	8,199	92,828	157,484	121,542	81,798
Grand total	247,898	--------	--------	--------	3,568,461	--------	--------	--------

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[1] Five-year average, except in a few cases where statistics for 5 years were not available.

[2] No official statistics.

[3] Unofficial estimate.

[4] Excludes territory occupied by the enemy.

[5] Excludes Alsace-Lorraine.

[6] Excluding Dobrudja.

[7] Including some native States.

[8] Old boundaries.

WHEAT—Continued.

TABLE 5—Wheat: Total production of countries named in Table 13, 1891-1916.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1891	2,432,322,000	1898	2,948,305,000	1905	3,327,084,000	1912	3,791,951,000
1892	2,481,805,000	1899	2,783,885,000	1906	3,434,354,000	1913	4,127,437,000
1893	2,559,174,000	1900	2,610,751,000	1907	3,133,965,000	1914	3,585,916,000
1894	2,660,557,000	1901	2,955,975,000	1908	3,182,105,000	1915	4,127,685,000
1895	2,593,312,000	1902	3,090,116,000	1909	3,581,519,000	1916	3,701,333,000
1896	2,506,320,000	1903	3,189,813,000	1910	3,575,055,000		
1897	2,236,268,000	1904	3,163,542,000	1911	3,551,795,000		

TABLE 6—Wheat: Acreage, production, and total farm value, by States, 1918 and 1919.

[000 omitted.]

States	Thousands of Acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1919	1918	1919	1918	1919	1918
Maine	12	22	228	484	502	1,147
Vermont	12	19	252	418	572	966
New York	524	430	11,178	7,840	24,032	16,856
New Jersey	109	87	1,962	1,479	4,316	3,180
Pennsylvania	1,664	1,503	29,055	25,551	62,758	54,679
Delaware	145	133	1,740	1,729	3,706	3,838
Maryland	790	732	10,665	11,346	22,930	24,848
Virginia	1,060	1,050	12,508	12,600	28,018	27,594
West Virginia	400	348	5,400	4,942	11,880	10,922
North Carolina	850	900	7,225	6,300	16,834	14,490
South Carolina	204	205	1,836	2,255	4,737	5,863
Georgia	240	280	2,520	2,856	6,628	7,597
Ohio	2,860	2,290	54,440	43,547	115,413	92,320
Indiana	2,886	2,353	46,020	49,427	96,642	102,808
Illinois	4,150	2,900	65,675	63,970	137,918	133,058
Michigan	1,035	762	20,237	10,856	42,497	22,689
Wisconsin	549	424	7,355	10,273	15,814	21,059
Minnesota	4,015	3,619	37,710	75,792	94,276	154,616
Iowa	1,700	1,240	23,675	23,382	47,350	46,764
Missouri	4,296	3,092	57,886	53,154	120,982	108,966
North Dakota	7,770	7,770	53,613	105,672	129,207	214,514
South Dakota	3,725	3,280	30,175	62,160	72,420	123,698
Nebraska	4,384	3,666	60,675	41,213	122,564	81,190
Kansas	11,624	7,248	151,001	102,008	324,652	202,996
Kentucky	1,046	933	12,029	12,129	25,381	25,956
Tennessee	810	750	7,290	7,500	16,184	16,050
Alabama	138	162	1,242	1,458	3,043	3,572
Mississippi	36	30	504	495	1,260	1,238
Texas	1,900	900	31,350	9,000	62,700	19,350
Oklahoma	3,760	2,611	52,640	32,899	107,912	66,127
Arkansas	340	254	3,230	3,048	6,525	6,309
Montana	2,221	2,386	10,729	29,961	25,214	58,124
Wyoming	284	260	4,008	6,600	8,497	12,474
Colorado	1,459	1,250	17,645	15,400	35,643	30,030
New Mexico	283	173	6,100	2,892	12,200	6,073
Arizona	43	38	1,204	988	2,709	2,371
Utah	304	320	3,682	6,464	7,732	12,152
Nevada	29	42	668	1,070	1,429	2,205

WHEAT—Continued.

TABLE 6—Wheat: Acreage, production, and total farm value, by States, 1918 and 1919—Continued.

States	Thousands of Acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1919	1918	1919	1918	1919	1918
Idaho	1,030	950	18,705	20,275	38,345	38,928
Washington	2,440	2,225	40,100	29,187	85,814	57,207
Oregon	1,126	1,038	20,495	15,228	43,449	30,608
California	990	506	16,335	7,590	33,323	16,394
United States	73,243	59,181	940,987	921,438	2,024,008	1,881,826

OATS.

TABLE 7—Oats: Area and production in undermentioned countries, 1909-1919.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909–1913[1]	1917	1918	1919	Average 1909–1913[1]	1917	1918	1919
NORTH AMERICA	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
United States	37,357	43,553	44,349	42,400	1,131,175	1,592,740	1,538,124	1,248,310
Canada:								
New Brunswick	204	190	224	305	5,933	4,275	7,051	9,852
Quebec	1,451	1,493	1,933	2,141	40,294	32,466	52,667	61,022
Ontario	2,964	2,687	2,924	2,674	105,036	98,075	131,752	76,219
Manitoba	1,379	1,500	1,715	1,847	54,192	45,375	54,474	64,193
Saskatchewan	2,293	4,522	4,988	4,838	98,481	123,214	107,253	117,316
Alberta	1,223	2,538	2,652	2,767	52,045	86,289	60,323	65,725
Other	326	383	354	425	11,697	13,316	12,792	16,809
Total Canada	9,840	13,313	14,790	14,997	367,678	403,010	426,312	411,136
Mexico	(2)	(2)	(2)	(2)	17	(2)	(2)	(2)
Total	47,197	56,866	59,139	57,397	1,498,870	1,995,750	1,964,436	1,659,446
SOUTH AMERICA								
Argentina	1,999	2,525	3,200	2,980	52,122	32,009	68,635	44,120
Chile	68	126	79	79	2,934	5,564	3,177	3,250
Uruguay	46	142	165	(2)	839	1,926	3,697	(2)
Total	2,113	2,793	3,444	--------	55,886	39,499	75,509	----------
EUROPE								
Austria[3]	4,613	(2)	(2)	(2)	143,392	(2)	(2)	(2)
Hungary proper[3]	2,669	(2)	(2)	(2)	85,840	(2)	(2)	(2)
Croatia-Slavonia[3]	246	(2)	(2)	(2)	5,216	(2)	(2)	(2)
Bosnia-Herzegovina[3]	225	(2)	(2)	(2)	4,973	(2)	(2)	(2)
Belgium	644	(2)	(2)	(2)	40,905	(2)	(2)	26,920
Bulgaria[3]	455	(2)	(2)	(2)	9,880	[4] 10,012	(2)	(2)
Denmark	1,028	981	937	961	43,115	37,653	41,571	(2)
Finland	(2)	(2)	(2)	(2)	21,989	(2)	(2)	(2)
France[3]	9,801	7,308	6,721	6,815	310,020	214,259	176,504	168,303

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[1] Five-year average except in a few cases where statistics for 5 years were not available.
[2] No official statistics.
[3] Old boundaries.
[4] Unofficial estimate.
[5] Excluding Alsace-Lorraine.
[6] Including Bessarabia but excluding Dobrudja.

OATS—Continued.

TABLE 7—Oats: Area and production in undermentioned countries, 1909-1919—Continued.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1917	1918	1919	Average 1909-1913[1]	1917	1918	1919
	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
Germany[3]	10,750	[5] 8,625	[5] 8,071	(2)	591,996	[5] 249,964	[4] 322,475	(2)
Greece	(2)	(2)	(2)	156	(2)	(2)	(2)	(2)
Italy	1,253	1,107	1,211	1,129	36,945	33,889	41,336	34,722
Luxemburg	(2)	56	48	(2)	(2)	2,015	1,459	(2)
Netherlands	346	371	392	368	18,512	18,594	18,617	20,512
Norway	266	356	343	343	10,245	17,004	16,582	16,810
Roumania	[3] 1,105	(2)	[6] 1,084	[6] 866	[3] 27,545	(2)	[6] 5,890	(2)
Russia proper[3]	38,013	(2)	(2)	(2)	874,945	(2)	(2)	(2)
Poland[3]	2,858	(2)	(2)	(2)	76,590	(2)	(2)	(2)
Northern Caucasia[3]	1,190	(2)	(2)	(2)	29,602	(2)	(2)	(2)
Serbia[3]	266	(2)	(2)	(2)	5,443	(2)	(2)	(2)
Spain	1,276	1,425	1,507	1,538	29,110	33,048	30,474	28,814
Sweden	1,969	1,933	1,811	(2)	79,115	[4] 67,142	57,880	(2)
United Kingdom:								
England	1,835	2,013	2,415	(2)	74,750	80,981	104,480	(2)
Wales	204	246	365	(2)	7,274	8,678	13,847	(2)
Scotland	952	1,041	1,244	1,110	37,670	44,949	53,284	40,340
Ireland	1,049	1,464	1,579	(2)	63,083	80,119	85,822	(2)
Total United Kingdom	4,040	4,764	5,603	--------	182,777	214,727	257,433	----------
Total	83,013	--------	--------	--------	2,628,155	----------	----------	----------
ASIA								
Cyprus	(2)	(2)	(2)	(2)	429	[4] 447	(2)	(2)
Russia:								
Central Asia (4 governments)[2]	938	(2)	(2)	(2)	15,044	(2)	(2)	(2)
Siberia (4 governments)[3]	3,972	(2)	(2)	(2)	72,305	(2)	(2)	(2)
Transcaucasia (1 government)[3]	2	(2)	(2)	(2)	54	(2)	(2)	(2)
Total	4,912	--------	--------	--------	87,832	----------	----------	----------
AFRICA								
Algeria	456	682	588	533	12,950	16,125	22,914	11,219
Tunis	141	124	151	127	4,333	3,996	4,271	3,445
Union of South Africa	(2)	250	257	(2)	7,197	6,927	(2)	(2)
Total	597	1,056	996	--------	24,480	27,048	----------	----------
AUSTRALASIA								
Australia:								
Queensland	2	7	(2)	(2)	47	109	(2)	(2)
New South Wales	75	67	(2)	(2)	1,571	1,083	(2)	(2)
Victoria	388	442	(2)	(2)	8,592	8,289	(2)	(2)
South Australia	101	152	107	174	1,371	1,840	1,249	1,609
Western Australia	81	122	96	(2)	1,204	1,689	909	(2)
Tasmania	61	55	(2)	(2)	2,066	1,006	(2)	(2)
Total Australia	708	845	616	--------	14,851	14,016	10,387	----------
New Zealand	376	177	156	173	13,664	5,371	4,943	6,926
Total Australasia	1,084	1,022	772	--------	28,515	19,387	15,330	----------
Grand total	138,916	--------	--------	--------	4,323,738	----------	----------	----------

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[1] Five-year average except in a few cases where statistics for 5 years were not available.
[2] No official statistics.
[3] Old boundaries.
[4] Unofficial estimate.
[5] Excluding Alsace-Lorraine.
[6] Including Bessarabia but excluding Dobrudja.

OATS—Continued.

TABLE 8—Oats: Total production in countries named in Table 7, 1895-1916.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1895	3,008,154,000	1901	2,862,615,000	1907	3,603,896,000	1913	4,697,437,000
1896	2,847,115,000	1902	3,626,303,000	1908	3,591,012,000	1914	4,034,857,000
1897	2,633,971,000	1903	3,378,034,000	1909	4,312,882,000	1915	4,362,713,000
1898	2,903,974,000	1904	3,611,302,000	1910	4,182,410,000	1916	4,138,050,000
1899	3,256,256,000	1905	3,510,167,000	1911	3,808,561,000		
1900	3,166,002,000	1906	3,544,961,000	1912	4,617,394,000		

TABLE 9—Oats: Acreage, production, and total farm value, by States, 1918 and 1919.

States	Thousands of Acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1919	1918	1919	1918	1919	1918
Maine	169	169	5,746	6,760	$5,286	$6,084
New Hampshire	33	30	1,221	1,140	1,038	992
Vermont	110	110	3,960	4,510	3,564	4,059
Massachusetts	15	12	570	480	513	437
Rhode Island	2	2	68	84	65	76
Connecticut	20	19	620	722	546	650
New York	1,160	1,260	29,580	51,660	24,551	43,394
New Jersey	82	79	2,460	3,160	1,968	2,496
Pennsylvania	1,189	1,210	36,859	47,190	29,487	37,752
Delaware	5	5	115	175	104	152
Maryland	65	60	1,820	1,980	1,492	1,703
Virginia	240	225	5,280	5,175	5,280	5,175
West Virginia	190	160	4,750	4,320	4,322	3,931
North Carolina	322	300	3,767	5,100	3,993	5,508
South Carolina	510	500	11,730	11,000	12,903	12,980
Georgia	540	550	10,800	11,000	12,420	13,090
Florida	60	60	1,140	1,080	1,368	1,242
Ohio	1,548	1,700	51,858	74,800	37,338	52,360
Indiana	1,825	2,025	60,225	85,050	41,555	56,984
Illinois	4,102	4,508	123,060	198,352	86,142	132,896
Michigan	1,475	1,658	36,875	66,320	26,181	45,761
Wisconsin	2,339	2,378	78,123	110,815	54,686	74,246
Minnesota	3,220	3,282	90,160	134,562	57,702	84,774
Iowa	5,670	5,823	196,182	244,566	125,556	156,522
Missouri	1,417	1,524	38,259	44,196	27,164	30,937
North Dakota	2,400	2,575	38,400	60,512	25,728	36,912
South Dakota	1,850	2,050	53,650	79,950	33,800	47,170
Nebraska	2,133	2,531	69,962	56,188	45,475	36,522
Kansas	1,574	2,329	44,229	51,238	32,287	37,404
Kentucky	440	400	9,900	9,600	9,009	8,640
Tennessee	400	325	9,200	8,125	8,556	7,556
Alabama	372	428	6,696	8,132	7,031	8,701
Mississippi	278	322	5,282	6,440	5,546	6,891
Louisiana	75	80	1,650	2,000	1,650	1,980
Texas	2,250	1,510	94,500	22,197	60,480	20,421
Oklahoma	1,500	1,300	49,500	31,200	34,650	26,208
Arkansas	420	390	9,240	9,945	8,131	8,752
Montana	612	680	6,120	20,400	5,569	16,320
Wyoming	315	285	5,670	11,685	6,350	9,348
Colorado	249	251	6,524	7,530	5,872	6,024

OATS—Continued.

TABLE 9—Oats: Acreage, production, and total farm value, by States, 1918 and 1919—Continued.

States	Thousands of Acres		Production (thousands of bushels)		Total value, basis December 1 price (thousands of dollars)	
	1919	1918	1919	1918	1919	1918
New Mexico	65	46	2,340	1,288	2,223	1,146
Arizona	13	11	533	440	533	528
Utah	72	90	2,448	4,050	2,399	3,928
Nevada	12	14	384	532	384	628
Idaho	220	237	7,700	9,480	7,546	8,911
Washington	320	310	12,800	8,370	11,904	8,203
Oregon	347	361	11,104	9,025	10,216	8,664
California	175	175	5,250	5,600	5,040	5,264
United States	42,400	44,349	1,248,310	1,538,124	895,603	1,090,322

BARLEY.

TABLE 10—Barley: Area and production in undermentioned countries, 1909-1919.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1917	1918	1919	Average 1909-1913[1]	1917	1918	1919
NORTH AMERICA	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
United States	7,619	8,933	9,740	7,420	181,881	211,759	256,225	165,719
Canada:								
New Brunswick	3	2	7	11	79	40	163	269
Quebec	99	166	189	235	2,382	3,064	4,551	5,237
Ontario	587	361	660	569	17,017	11,191	24,248	13,803
Manitoba	561	708	1,103	849	15,954	15,930	27,963	18,326
Saskatchewan	234	670	699	493	7,350	14,068	11,888	9,236
Alberta	185	472	470	414	5,364	10,386	7,756	10,562
Other	14	13	25	30	386	379	718	903
Total Canada	1,683	2,392	3,153	2,601	48,532	55,058	77,287	58,336
Mexico	(2)	(2)	(2)	(2)	6,666	(2)	17,711	(2)
Total	9,302	--------	--------	--------	237,079	--------	351,223	--------
SOUTH AMERICA								
Argentina	268	388	(2)	(2)	3,626	2,165	(2)	(2)
Chile	117	125	98	98	3,924	4,840	3,304	3,977
Uruguay	4	13	6	(2)	61	110	108	(2)
Total	389	526	--------	--------	7,611	7,115	--------	--------
EUROPE								
Austria[8]	2,712	(2)	(2)	(2)	71,988	(2)	(2)	(2)
Hungary proper[8]	2,760	(2)	(2)	(2)	69,812	(2)	(2)	(2)

[1] Five-year average except in a few cases where statistics for 5 years were not available.
[2] No official statistics.
[3] Unofficial estimate.
[4] Excludes territory that was occupied by the enemy.
[5] Excluding Alsace-Lorraine.
[6] Including Bessarabia but excluding Dobrudja.
[7] Incomplete.
[8] Old boundaries.

BARLEY—Continued.

TABLE 10—Barley: Area and production in undermentioned countries, 1909-1919—Continued.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1917	1918	1919	Average 1909-1913[1]	1917	1918	1919
	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
Croatia-Slavonia[8]	158	(2)	(2)	(2)	2,540	(2)	(2)	(2)
Bosnia-Herzegovina[8]	214	(2)	(2)	(2)	3,455	(2)	(2)	(2)
Belgium	85	(2)	(2)	75	4,247	(2)	(2)	3,617
Bulgaria[8]	616	(2)	(2)	(2)	12,425	[3] 14,739	(2)	(2)
Denmark	591	592	548	569	22,589	17,881	21,465	(2)
Finland	(2)	(2)	(2)	(2)	5,737	(2)	(2)	(2)
France[8]	1,866	[4] 1,699	[4] 1,371	1,340	46,489	[4] 37,265	[4] 27,475	23,626
Germany[8]	3,976	[5] 3,738	[5] 3,640	(2)	153,529	[5] 89,886	[5] 103,720	(2)
Italy	613	469	494	479	10,104	7,422	9,186	8,327
Luxemburg	(2)	7	7	(2)	(2)	154	136	(2)
Netherlands	68	52	60	59	3,270	2,573	2,615	2,688
Norway	89	116	156	156	2,867	4,021	5,622	[3] 5,787
Roumania	[8] 1,319	(2)	[6] 2,120	[6] 1,827	[8] 24,821	(2)	[6] 4,993	(2)
Russia proper[8]	23,075	(2)	(2)	(2)	372,856	(2)	(2)	(2)
Poland[8]	1,249	(2)	(2)	(2)	27,150	(2)	(2)	(2)
Northern Caucasia[8]	3,735	(2)	(2)	(2)	67,191	(2)	(2)	(2)
Serbia[8]	242	(2)	(2)	(2)	5,072	(2)	(2)	(2)
Spain	3,509	4,086	4,209	4,100	74,689	76,747	90,496	74,432
Sweden	451	438	452	(2)	14,592	12,263	12,947	(2)
United Kingdom:								
England	1,400	1,365	1,395	(2)	47,352	42,897	45,328	(2)
Wales	88	95	106	(2)	2,812	2,781	3,312	(2)
Scotland	191	159	153	174	7,103	5,816	5,416	6,083
Ireland	165	177	185	(2)	7,493	7,796	8,024	(2)
Total United Kingdom	1,844	1,796	1,839	--------	64,760	59,290	62,080	----------
Total	49,172	--------	--------	--------	1,060,183	----------	----------	----------
ASIA								
British India	7,836	7,883	[7] 8,323	(2)	40,973	155,447	[7] 155,307	(2)
Cyprus	(2)	(2)	(2)	(2)	2,151	[3] 1,954	(2)	(2)
Japanese Empire:								
Japan	3,183	2,888	2,862	2,931	89,528	88,896	82,650	91,500
Formosa	5	(2)	(2)	(2)	53	(2)	(2)	(2)
Korea	(2)	(2)	(2)	(2)	(2)	(2)	27,751	26,480
Total Japanese Empire	3,188	--------	--------	--------	89,581	----------	----------	----------
Russia:								
Central Asia (4 governments)[8]	368	(2)	(2)	(2)	5,119	(2)	(2)	(2)
Siberia (4 governments)[8]	459	(2)	(2)	(2)	6,027	(2)	(2)	(2)
Transcaucasia (1 government)[8]	2	(2)	(2)	(2)	25	(2)	(2)	(2)
Total	11,853	--------	--------	--------	143,876	----------	----------	----------
AFRICA								
Algeria	3,353	2,839	2,794	2,639	41,961	28,529	60,742	33,667
Egypt	394	445	336	357	(2)	13,598	9,871	(2)
Tunis	1,145	1,038	1,197	977	7,900	8,267	13,090	6,110
Union of South Africa	(2)	57	58	55	2,015	1,000	(2)	(2)
Total	4,892	4,379	4,385	4,028	51,876	51,394	----------	----------

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[1] Five-year average except in a few cases where statistics for 5 years were not available.
[2] No official statistics.
[3] Unofficial estimate.
[4] Excludes territory that was occupied by the enemy.
[5] Excluding Alsace-Lorraine.
[6] Including Bessarabia but excluding Dobrudja.
[7] Incomplete.
[8] Old boundaries.

BARLEY—Continued.

TABLE 10—Barley: Area and production in undermentioned countries, 1909-1919—Continued.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1917	1918	1919	Average 1909-1913[1]	1917	1918	1919
AUSTRALASIA	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
Queensland	7	13	(1)	(1)	119	250	(2)	(2)
New South Wales	12	5	(1)	(1)	204	73	(2)	(2)
Victoria	60	93	(1)	(1)	1,400	1,800	(2)	(2)
South Australia	46	104	(1)	(1)	842	1,734	(2)	(2)
Western Australia	6	11	(1)	(1)	70	134	(2)	(2)
Tasmania	6	5	(1)	(1)	184	89	(2)	(2)
Total Australia	137	231			2,819	4,080		
New Zealand	39	30	19	19	1,402	738	569	709
Total Australasia	176	261			4,221	4,818		
Grand total	75,784				1,504,846			

[1] No official statistics.

TABLE 11—Barley: Total production of countries named in Table 10, 1895-1916.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1895	915,504,000	1901	1,072,195,000	1907	1,271,237,000	1913	1,650,265,000
1896	932,100,000	1902	1,229,132,000	1908	1,274,897,000	1914	1,463,289,000
1897	864,605,000	1903	1,235,786,000	1909	1,458,263,000	1915	1,522,732,000
1898	1,030,581,000	1904	1,175,784,000	1910	1,388,734,000	1916	1,529,031,000
1899	965,720,000	1905	1,180,053,000	1911	1,373,286,000		
1900	959,622,000	1906	1,296,579,000	1912	1,466,977,000		

TABLE 11A—Barley: Acreage, production, and total farm value, by States, 1919.

[000 omitted.]

State	Acreage	Production	Farm value Dec. 1	State	Acreage	Production	Farm value Dec. 1
	Acres	Bushels	Dollars		Acres	Bushels	Dollars
Maine	6	168	286	Kansas	600	16,200	16,200
New Hampshire	1	25	47	Kentucky	4	100	157
Vermont	14	420	630	Tennessee	8	176	317
New York	113	2,486	3,381	Texas	25	875	980
Pennsylvania	16	392	502	Oklahoma	50	1,500	1,830
Maryland	6	198	244	Montana	90	540	756
Virginia	15	375	488	Wyoming	35	525	919
Ohio	125	3,150	3,938	Colorado	200	3,900	4,680
Indiana	55	1,430	1,687	New Mexico	20	680	748
Illinois	212	5,724	6,926	Arizona	29	1,102	1,543
Michigan	280	5,320	6,278	Utah	24	720	1,015
Wisconsin	512	13,568	16,417	Nevada	12	420	630
Minnesota	910	18,200	21,112	Idaho	120	3,360	4,704
Iowa	315	8,032	8,996	Washington	138	4,140	5,589
				Oregon	82	1,886	2,829
Missouri	11	330	429	California	1,000	30,000	42,306
North Dakota	1,300	14,950	16,146				
South Dakota	875	19,250	22,138	United States	7,420	165,719	200,419
Nebraska	217	5,577	5,577				

RYE.

TABLE 12—Rye: Area and production in undermentioned countries, 1909-1919.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1917	1918	1919	Average 1909-1913[1]	1917	1918	1919
NORTH AMERICA	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
United States	2,236	4,317	6,391	7,063	34,916	62,933	91,041	88,478
Canada:								
Quebec	14	22	29	33	234	376	472	578
Ontario	77	68	113	141	1,405	1,207	1,813	2,318
Manitoba	5	37	240	299	96	638	3,936	4,783
Saskatchewan	3	53	124	190	55	998	1,420	1,667
Alberta	12	31	48	84	297	633	826	1,508
Other	1	1	1	7	9	5	37	149
Total Canada	112	212	555	754	2,096	3,857	8,504	11,003
Mexico	(2)	(2)	(2)	(2)	70	(2)	(2)	(2)
Total	2,348				37,082			
SOUTH AMERICA								
Argentina	68	180	(2)	(2)	949	858	(2)	(2)
Chile	6	6	8	8	144	92	176	192
Uruguay	(3)	(3)	(3)	(3)	1	1	1	(3)
Total	74				1,094	951		
EUROPE								
Austria[4]	5,019	(2)	(2)	(2)	112,752	(2)	(2)	(2)
Hungary proper	2,601	(2)	(2)	(2)	48,716	(2)	(2)	(2)
Croatia-Slavonia[4]	185	(2)	(2)	(2)	2,231	(2)	(2)	(2)
Bosnia-Herzegovina[4]	39	(2)	(2)	(2)	444	(2)	(2)	(2)
Belgium	644	(2)	(2)	496	22,675	(2)	(2)	13,681
Bulgaria[4]	530	(2)	(2)	(2)	8,553	[5] 8,490	(2)	(2)
Denmark	632	436	542	559	18,098	8,870	12,726	(2)
Finland	(2)	(2)	(2)	(2)	11,174	(2)	(2)	(2)
France[4]	2,960	[6] 1,834	[6] 1,746	1,817	48,647	[6] 24,768	[6] 29,935	27,833
Germany[1]	15,387	[7] 13,650	[7] 14,200	(2)	445,222	[7] 274,677	[7] 315,301	(2)
Italy	303	279	272	272	5,328	4,460	4,724	4,571
Luxemburg	(2)	17	17	(2)	(2)	292	422	(2)
Netherlands	557	463	472	481	16,422	11,958	13,022	14,057
Norway	37	58	37	37	974	1,159	1,012	[5] 1,063
Roumania	[4] 317	(2)	[8] 624	[8] 523	[4] 4,652	(2)	[8] 1,694	(2)
Russia proper	64,575	(2)	(2)	(2)	791,333	(2)	(2)	(2)
Poland[4]	5,261	(2)	(2)	(2)	90,494	(2)	(2)	(2)
Northern Caucasia[4]	547	(2)	(2)	(2)	7,409	(2)	(2)	(2)
Serbia[4]	114	(2)	(2)	(2)	1,533	(2)	(2)	(2)
Spain	1,987	1,800	1,818	1,822	27,635	24,365	30,445	24,635
Sweden	977	815	948	(2)	23,859	14,080	19,793	(2)
Switzerland	(2)	55	72	51	(2)	1,752	1,850	1,575
United Kingdom	61	64	116	122	1,751	(2)	(2)	(2)
Total	102,733				1,689,902			
ASIA								
Russia:								
Central Asia (4 governments)[4]	176	(2)	(2)	(2)	1,001	(2)	(2)	(2)
Siberia (4 governments)[4]	2,273	(3)	(3)	(3)	23,647	(3)	(3)	(3)
Transcaucasia (1 government)[4]	2	(3)	(3)	(3)	15	(3)	(3)	(3)
Total	2,451				24,663			

[1] Five-year average, except in a few cases where statistics for 5 years were not available.
[2] No official statistics.
[3] Less than 500.
[4] Old boundaries.
[5] Unofficial estimate.
[6] Excluding territory occupied by enemy.
[7] Excludes Alsace-Lorraine.
[8] Including Bessarabia, but excluding Dobrudja.

RYE—Continued.

TABLE 12—Rye: Area and production in undermentioned countries, 1909-1919 —Continued.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909–1913	1917	1918	1919	Average 1909–1913	1917	1918	1919
AUSTRALASIA								
Australia:	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
Queensland	(2)	(2)	(1)	(1)	2	2	(1)	(1)
New South Wales	4	2	(2)	(2)	49	31	(2)	(2)
Victoria	2	3	(2)	(2)	24	43	(2)	(2)
South Australia	1	2	(2)	(2)	10	11	4	(2)
Western Australia	1	1	(1)	(2)	5	4	1	(2)
Tasmania	1	1	(2)	(2)	18	7	(2)	(2)
Total Australia	9	9	--------	--------	108	98	--------	--------
New Zealand	5	(2)	(2)	(2)	97	(2)	(2)	(2)
Total	14	--------	--------	--------	205	--------	--------	--------
Grand total	107,620	--------	--------	--------	1,752,946	--------	--------	--------

[1] No official statistics.

[2] Less than 500.

TABLE 13—Rye: Total production of countries in Table 55, 1895-1915.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1895	1,468,212,000	1901	1,416,022,000	1907	1,538,778,000	1913	1,880,387,000
1896	1,499,250,000	1902	1,647,845,000	1908	1,590,057,000	1914	1,596,882,000
1897	1,300,645,000	1903	1,659,961,000	1909	1,747,123,000	1915	1,577,490,000
1898	1,461,171,000	1904	1,742,112,000	1910	1,673,473,000		
1899	1,583,179,000	1905	1,495,751,000	1911	1,753,933,000		
1900	1,557,634,000	1906	1,433,395,000	1912	1,886,517,000		

TABLE 14—Rye: Acreage (sown and harvested), production, and total farm value, by States, 1919.

[000 omitted.]

State	Acreage		Production	Farm value Dec. 1
	Sown in fall of 1918	Harvested		
	Acres	Acres	Bushels	Dollars
Vermont	1	1	17	26
Massachusetts	5	5	115	201
Connecticut	12	11	220	440
New York	126	120	1,932	2,898
New Jersey	84	81	1,296	2,074
Pennsylvania	230	228	3,648	5,727
Delaware	1	2	26	42
Maryland	31	30	420	685
Virginia	73	72	828	1,408
West Virginia	21	20	260	429

RYE—Continued.

TABLE 14—Rye: Acreage (sown and harvested), production, and total farm value, by States, 1919—Continued.

[000 omitted.]

State	Acreage		Production	Farm value Dec. 1
	Sown in fall of 1918	Harvested		
	Acres	Acres	Bushels	Dollars
North Carolina	92	90	810	1,701
South Carolina	18	17	170	502
Georgia	35	33	294	800
Ohio	116	115	1,886	2,735
Indiana	384	380	5,320	7,448
Illinois	250	250	4,125	5,362
Michigan	910	900	13,500	17,280
Wisconsin	525	525	8,295	11,032
Minnesota	535	522	7,830	10,179
Iowa	70	70	1,113	1,469
Missouri	60	60	720	1,080
North Dakota	2,068	1,945	15,560	18,828
South Dakota	565	500	6,500	8,125
Nebraska	410	408	6,650	7,648
Kansas	202	200	2,520	3,553
Kentucky	63	62	744	1,302
Tennessee	32	31	279	558
Alabama	4	4	38	99
Texas	7	7	119	199
Oklahoma	26	25	350	525
Arkansas	3	3	28	56
Montana	75	68	272	503
Wyoming	30	28	252	454
Colorado	120	143	1,258	1,635
Utah	19	18	126	252
Idaho	9	9	135	236
Washington	20	20	240	444
Oregon	60	60	582	1,106
United States	7,232	7,063	88,478	119,041

FLAX.

TABLE 15—Flax: Area and production in undermentioned countries, 1909-1918.

[000 omitted.]

Country	Area				Production							
					Seed				Fiber			
	Average 1909-1913[1]	1916	1917	1918	Average 1909-1913[1]	1916	1917	1918	Average 1909-1913[1]	1916	1917	1918
NORTH AMERICA	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Lbs.	Lbs.	Lbs.	Lbs.
United States	2,490	1,474	1,984	1,938	19,505	14,296	9,164	14,657	-------	-------	-------	-------
Canada:												
Quebec	1	1	6	7	11	5	47	83	-------	-------	-------	-------
Ontario	8	4	4	16	128	42	52	196	-------	-------	-------	-------

[1] Five-year average except where statistics were not available.

FLAX—Continued.

TABLE 15—Flax: Area and production in undermentioned countries, 1909-1918 —Continued.

[000 omitted.]

Country	Area				Production							
					Seed				Fiber			
	Average 1909-1913[1]	1916	1917	1918	Average 1909-1913[1]	1916	1917	1918	Average 1909-1913[1]	1916	1917	1918
	Acres	Acres	Acres	Acres	Bush.	Bush.	Bush.	Bush.	Lbs.	Lbs.	Lbs.	Lbs.
Manitoba	58	16	16	108	706	210	147	1,091	------	------	------	------
Saskatchewan	893	542	754	841	10,393	6,692	4,710	4,205	------	------	------	------
Alberta	76	95	140	96	830	1,311	979	480	------	------	------	------
Total Canada	1,036	658	920	1,068	12,068	8,260	5,935	6,055	------	------	------	------
Mexico	(2)	(2)	(2)	(2)	150	(2)	(2)	(2)	------	------	------	------
Total	3,526	2,132	2,904	3,006	31,723	22,556	15,099	20,712	------	------	------	------
SOUTH AMERICA												
Argentina	3,683	4,001	3,207	3,229	31,989	39,289	4,032	19,588	------	------	------	------
Uruguay	106	44	36	30	793	391	122	333	------	------	------	------
Total	3,789	4,045	3,243	3,259	32,782	39,680	4,154	19,921	------	------	------	------
EUROPE												
Austria[3]	97	(2)	(2)	(2)	694	(2)	(2)	(2)	53,096	(2)	(2)	(2)
Hungary[3]	24	(2)	(2)	(2)	196	(2)	(2)	(2)	20,548	(2)	(2)	(2)
Croatia-Slavonia[3]	17	(2)	(2)	(2)	21	(2)	(2)	(2)	8,046	(2)	(2)	(2)
Bosnia-Herzegovina[3]	(2)	(2)	(2)	(2)	4	(2)	(2)	(2)	1,080	(2)	(2)	(2)
Belgium	50	(2)	(2)	(2)	443	(2)	(2)	(2)	46,487	(2)	(2)	(2)
Bulgaria[3]	1	(2)	(2)	(2)	7	(2)	(2)	(2)	524	(2)	(2)	(2)
France[3] [4]	61	15	20	21	533	146	134	(2)	40,623	11,061	8,909	(2)
Ireland	53	91	108	143	(2)	(2)	(2)	(2)	23,701	32,461	34,410	(2)
Italy	22	21	20	46	320	362	323	472	6,289	5,512	5,291	5,291
Netherlands	33	30	30	14	374	367	222	145	17,276	21,844	11,756	6,559
Roumania[3]	52	20	(2)	[5] 186	503	(2)	(2)	[5] 292	4,864	(2)	(2)	4,455
Russia proper[3]	3,217	3,505	(2)	(2)	19,772	(2)	(2)	(2)	1,022	(2)	(2)	(2)
Poland[3]	88	(2)	(2)	(2)	874	(2)	(2)	(2)	42,450	(2)	(2)	(2)
Northern Caucasia[3]	104	(2)	(2)	(2)	679	(2)	(2)	(2)	26,130	(2)	(2)	(2)
Serbia[3]	4	(2)	(2)	(2)	(2)	(2)	(2)	(2)	1,812	(2)	(2)	(2)
Spain	(2)	3	4	4	(2)	(2)	22	65	(2)	(2)	(2)	6,768
Sweden[6]	4	(2)	(2)	5	15	(2)	(2)	(2)	1,208	333	(2)	(2)
Total	3,827	------	------	------	24,435	------	------	------	295,156	------	------	------
ASIA												
British India[7]	3,821	3,334	3,564	3,797	19,733	19,040	21,040	20,600	------	------	------	------
Japan	12	36	48	(2)	(2)	(2)	(2)	(2)	30,187	104,028	101,441	(2)
Russia:												
Central Asia (4 governments)	120	(2)	(2)	(2)	510	(2)	(2)	(2)	51,864	(2)	(2)	(2)
Siberia (4 gov.)	147	(2)	(2)	(2)	852	(2)	(2)	(2)	38,109	(2)	(2)	(2)
Transcaucasia (1 government)	18	(2)	(2)	(2)	94	(2)	(2)	(2)	6,429	(2)	(2)	(2)
Total	4,118	------	------	------	21,189	------	------	------	126,589	------	------	------
AFRICA												
Algeria	1	1	1	(2)	11	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Grand total	15,261	------	------	------	110,140	------	------	------	421,745	------	------	------

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[1] Five-year average except where statistics were not available.
[2] No official statistics.
[3] Old boundaries.
[4] Excludes territory occupied by the enemy.
[5] Including Bessarabia but excluding Dobrudja.
[6] Includes hemp.
[7] Includes certain native States.

FLAX—Continued.

TABLE 16—Flax (seed and fiber): Total production of countries named in Table 73, 1896-1915.

Year	Production		Year	Production	
	Seed	Fiber		Seed	Fiber
	Bushels	Pounds		Bushels	Pounds
1896	82,684,000	1,714,205,000	1906	88,165,000	1,871,723,000
1897	57,596,000	1,498,054,000	1907	102,960,000	2,042,390,000
1898	72,938,000	1,780,693,000	1908	100,850,000	1,907,591,000
1899	66,348,000	1,138,763,000	1909	100,820,000	1,384,524,000
1900	62,432,000	1,315,931,000	1910	85,253,000	913,112,000
1901	72,314,000	1,050,260,000	1911	101,339,000	1,011,350,000
1902	83,891,000	1,564,840,000	1912	130,291,000	1,429,967,000
1903	110,455,000	1,492,383,000	1913	132,477,000	1,384,757,000
1904	107,743,000	1,517,922,000	1914	94,559,000	1,044,746,000
1905	100,458,000	1,494,229,000	1915	103,287,000	975,685,000

TABLE 17—Flaxseed: Acreage, production, and total farm value, by States, 1919.

State	Acreage	Average yield per acre	Production	Average farm price per bushel Dec. 1	Farm value Dec. 1
	Acres	Bushels	Bushels	Dollars	Dollars
Wisconsin	6,000	10.5	63,000	$ 4.30	$ 271,000
Minnesota	320,000	9.0	2,880,000	4.45	12,816,000
Iowa	16,000	9.5	152,000	4.20	638,000
Missouri	5,000	9.5	48,000	4.48	215,000
North Dakota	760,000	5.0	3,800,000	4.41	16,758,000
South Dakota	145,000	8.0	1,160,000	4.25	4,930,000
Nebraska	3,000	5.0	15,000	4.00	60,000
Kansas	14,000	6.3	88,000	3.80	334,000
Montana	410,000	1.7	697,000	4.40	3,067,000
Wyoming	4,000	4.0	16,000	3.50	56,000
United States	1,683,000	5.3	8,919,000	$ 4.39	$ 39,145,000

POTATOES.

TABLE 18—Potatoes: Area and production in undermentioned countries, 1909-1918.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1916	1917	1918	Average 1909-1913[1]	1916	1917	1918
NORTH AMERICA	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
United States	3,680	3,565	4,374	4,210	356,627	286,953	438,618	400,106
Canada:								
Prince Edward Island	32	31	35	30	5,901	6,386	6,125	5,295
Nova Scotia	32	34	41	50	6,627	6,935	7,173	9,306
New Brunswick	42	39	46	56	8,898	7,488	6,891	10,269
Quebec	120	112	227	290	19,723	14,672	18,158	36,149

[1] Five-year average, except where statistics were not available.

POTATOES—Continued.

TABLE 18—Potatoes: Area and production in undermentioned countries, 1909-1918—Continued.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1916	1917	1918	Average 1909-1913[1]	1916	1917	1918
	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
Ontario	156	133	142	155	20,720	8,113	18,981	17,224
Manitoba	26	32	34	44	4,755	4,709	3,643	6,897
Saskatchewan	29	47	68	59	4,812	7,319	9,010	8,054
Alberta	24	29	49	45	3,934	4,783	7,409	6,188
British Columbia	14	15	15	14	3,128	2,892	2,502	2,807
Total Canada	475	472	657	713	78,498	63,297	79,892	102,189
Mexico	(2)	(2)	(2)	(2)	924	(2)	(2)	452
Newfoundland	(2)	(2)	(2)	(2)	1,495	(2)	(2)	(2)
Total	4,155	4,037	5,031	4,923	437,544	350,250	518,510	502,747
SOUTH AMERICA								
Argentina	235	322	(2)	(2)	40,216	31,138	(2)	(2)
Chile	66	79	70	78	8,023	11,598	9,091	9,768
Total	301	401	--------	--------	48,239	42,736	--------	--------
EUROPE								
Austria[3]	3,105	(2)	(2)	(2)	456,485	(2)	(2)	(2)
Hungary proper[3]	1,521	(3)	(2)	(2)	180,103	(2)	(2)	(2)
Croatia-Slavonia[3]	193	(2)	(2)	(2)	22,254	(2)	(2)	(2)
Bosnia-Herzegovina[3]	69	(2)	(2)	(2)	3,359	(2)	(2)	(2)
Belgium	390	(2)	(2)	(2)	107,021	(2)	(2)	(2)
Bulgaria[3]	8	(2)	(2)	(2)	454	(2)	(2)	(2)
Denmark	145	159	143	186	32,440	26,629	31,882	40,605
Finland	184	(2)	(2)	(2)	20,975	(2)	(2)	(2)
France[3]	3,841	3,163	3,482	2,884	489,377	322,647	401,336	228,433
Germany[3]	8,260	[4] 6,782	[4] 6,186	[4] 6,740	1,681,959	[4] 907,136	[4]1,264,374	1,082,816
Italy	658	729	732	739	60,813	54,277	48,112	51,806
Luxemburg	36	34	27	25	6,439	2,971	5,925	4,731
Malta	4	3	(2)	(2)	672	356	(2)	(2)
Netherlands	414	413	419	405	110,153	105,040	130,288	123,978
Norway	102	114	145	133	24,821	31,310	42,584	28,954
Roumania[3] [5]	28	35	(2)	78	3,634	(2)	(2)	2,409
Do.[3] [6]	58	(2)	(2)	[7] 38	1,144	(2)	(2)	[7] 250
Russia proper[3]	8,302	5,879	(2)	(2)	862,798	662,169	(2)	(2)
Poland[3]	2,628	(2)	(2)	(2)	373,917	(2)	(2)	(2)
Northern Caucasia[3]	197	(2)	(2)	(2)	15,663	(2)	(2)	(2)
Serbia[3]	30	(2)	(2)	(2)	2,201	(2)	(2)	(2)
Spain	687	(2)	839	728	93,413	(2)	113,477	94,767
Sweden	379	373	397	398	60,327	54,972	83,700	71,129
Switzerland	186	200	140	168	40,537	18,372	38,580	43,355
United Kingdom:								
England	408	400	473	597	94,487	88,484	117,351	148,848
Scotland	145	130	148	169	34,674	19,825	41,443	42,970
Wales	26	28	35	37	5,403	5,018	7,380	8,288
Ireland	590	586	709	702	119,874	90,845	155,036	144,230
Total United Kingdom	1,169	1,144	1,370	1,505	254,438	204,172	321,210	344,336
Total	32,594	--------	--------	--------	4,905,397	--------	--------	--------
ASIA								
Japan	174	254	246	273	24,738	38,613	36,924	41,275

[1] Five-year average, except where statistics were not available.
[2] No official statistics.
[3] Old boundaries.
[4] Excludes Alsace-Lorraine.
[5] Grown alone.
[6] Grown with corn.
[7] Including Bessarabia, but excluding Dobrudja

POTATOES—Continued.

TABLE 18—Potatoes: Area and production in undermentioned countries, 1909-1918—Continued.

[000 omitted.]

Country	Area				Production			
	Aver'ge 1909-1913[1]	1916	1917	1918	Average 1909-1913[1]	1917	1918	1919
	Acres	Acres	Acres	Acres	Bushels	Bushels	Bushels	Bushels
Russia, Asiatic:								
Central Asia (4 governments)[3]	90	(2)	(2)	(2)	5,230	(2)	(2)	(2)
Siberia (4 governments)[3]	298	(2)	(2)	(2)	27,773	(2)	(2)	(2)
Transcaucasia (1 government)[3]	2	(2)	(2)	(2)	148	(2)	(2)	(2)
Total	573	--------	--------	--------	z 57,889	----------	----------	----------
AFRICA								
Algeria	45	(2)	27	(2)	1,783	(2)	2,756	(2)
Union of South Africa	62	(2)	(2)	(2)	3,269	(2)	(2)	(2)
Total	107	--------	--------	--------	5,052	----------	----------	----------
AUSTRALASIA								
Australia:								
Queensland	8	6	9	(2)	524	278	726	(2)
New South Wales	39	20	22	(2)	3,378	1,658	1,691	(2)
Victoria	55	57	74	(2)	5,983	6,489	7,018	(2)
South Australia	8	4	5	4	894	485	759	422
Western Australia	3	5	6	(2)	309	527	629	(2)
Tasmania	24	29	34	(2)	2,989	2,983	2,503	(2)
Total Australia	137	121	150	--------	14,077	12,420	13,326	----------
New Zealand	28	30	26	23	6,047	4,809	4,992	3,756
Total Australasia	165	151	176	--------	20,124	17,229	18,318	----------
Grand total	37,895	--------	--------	--------	5,474,245	----------	----------	----------

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[1] Five-year average, except where statistics were not available.
[2] No official statistics.
[3] Old boundaries.

TABLE 19—Potatoes: Total production of countries mentioned in Table 18, 1900-1915.

Year	Production	Year	Production	Year	Production	Year	Production
	Bushels		Bushels		Bushels		Bushels
1900	4,382,031,000	1904	4,298,049,000	1908	5,295,043,000	1912	5,872,953,000
1901	4,669,958,000	1905	5,254,598,000	1909	5,595,567,000	1913	5,802,910,000
1902	4,674,000,000	1906	4,789,112,000	1910	5,242,278,000	1914	5,016,291,000
1903	4,409,793,000	1907	5,122,078,000	1911	4,842,109,000	1915	5,361,898,000

TABLE 20—Potatoes: Acreage, production, and total farm value, by States, 1919.

[000 omitted.]

State	Acreage	Production	Farm value Dec. 1	State	Acreage	Production	Farm value Dec. 1
	Acres	Bushels	Dollars		Acres	Bushels	Dollars
Maine	102	24,480	34,272	Connecticut	24	1,680	3,276
New Hampshire	20	2,400	4,200	New York	363	39,567	57,372
Vermont	25	3,125	4,906	New Jersey	110	10,560	17,846
Massachusetts	33	2,970	5,643	Pennsylvania	254	25,400	39,116
Rhode Island	5	425	765	Delaware	11	913	1,141

POTATOES—Continued.

TABLE 20—Potatoes: Acreage, production, and total farm value, by States, 1919—Continued.

State	Acreage	Production	Farm value Dec. 1	State	Acreage	Production	Farm value Dec. 1
	Acres	Bushels	Dollars		Acres	Bushels	Dollars
Maryland	55	5,170	6,721	Tennessee	48	3,120	5,366
Virginia	121	11,495	18,047	Alabama	44	3,520	7,568
West Virginia	57	5,130	8,978	Mississippi	18	1,530	2,830
North Carolina	58	4,930	8,036	Louisiana	25	1,600	3,520
South Carolina	27	2,295	4,590	Texas	52	3,796	7,972
Georgia	23	1,610	3,494	Oklahoma	44	3,520	7,216
Florida	24	1,824	3,830	Arkansas	41	3,321	6,808
Ohio	150	9,300	17,856	Montana	47	2,820	4,512
Indiana	100	4,400	8,580	Wyoming	33	2,640	5,016
Illinois	155	8,060	15,798	Colorado	92	11,040	18,768
Michigan	326	28,688	38,729	New Mexico	11	495	940
Wisconsin	300	28,200	39,480	Arizona	5	350	682
Minnesota	300	26,100	39,933	Utah	17	2,397	3,284
Iowa	115	4,945	9,494	Nevada	6	900	1,350
Missouri	110	8,250	15,180				
North Dakota	90	5,670	9,072	Idaho	36	5,400	8,154
South Dakota	90	4,500	8,550	Washington	58	7,250	10,512
Nebraska	115	6,325	12,018	Oregon	45	4,230	6,345
Kansas	68	5,168	9,819	California	88	11,352	19,412
Kentucky	72	5,040	10,584	United States	4,013	357,901	577,581

HAY.

TABLE 21—Hay: Acreage, production, and total farm value, by States, 1919.

[000 omitted.]

State	Acreage	Production	Farm value Dec. 1	State	Acreage	Production	Farm value Dec. 1
	Acres	Tons	Dollars		Acres	Tons	Dollars
Maine	1,120	1,456	$ 27,227	North Dakota	605	908	$ 12,803
New Hampshire	450	675	16,200	South Dakota	890	1,558	21,033
Vermont	910	1,456	29,266	Nebraska	1,769	4,299	60,186
Massachusetts	410	656	17,712	Kansas	1,832	4,507	71,211
Rhode Island	57	86	2,752	Kentucky	1,115	1,561	39,649
Connecticut	340	544	16,429	Tennessee	1,280	1,792	48,384
New York	4,386	6,579	134,870	Alabama	1,367	1,367	30,484
New Jersey	325	488	14,201	Mississippi	405	648	13,284
Pennsylvania	2,978	4,318	103,632	Louisiana	250	450	10,350
Delaware	82	105	2,730	Texas	662	1,258	22,644
Maryland	450	630	15,120	Oklahoma	700	1,540	23,254
Virginia	1,100	1,650	39,105	Arkansas	550	770	15,785
West Virginia	810	1,215	31,104	Montana	752	827	19,021
North Carolina	800	1,040	25,168	Wyoming	605	853	19,619
South Carolina	275	358	11,098	Colorado	1,065	2,396	44,326
Georgia	557	613	15,509	New Mexico	235	646	11,757
Florida	113	141	3,243	Arizona	169	676	13,520
Ohio	2,879	3,973	86,611	Utah	453	938	20,542
Indiana	2,200	3,080	66,528	Nevada	225	526	10,310
Ilinois	3,250	4,810	102,934				
Michigan	2,650	3,180	74,412	Idaho	650	1,625	35,750
Wisconsin	2,677	4,738	96,181	Washington	794	1,906	43,838
Minnesota	2,000	3,800	55,100	Oregon	854	1,452	27,733
Iowa	3,140	5,181	90,149	California	2,352	4,257	73,220
Missouri	2,810	3,794	73,983	United States	56,348	91,326	$1,839,967

CLOVER AND TIMOTHY SEED.

TABLE 22--Clover seed: Acreage, production, and value, by States, 1919, and totals, 1916-1918.

State and Year	Acreage	Average yield per acre	Production	Average farm price per bushel Nov. 15	Farm value Nov. 15
	Acres	Bushels	Bushels	Dollars	Dollars
New York	15,000	2.2	33,000	$ 25.00	$ 825,000
Pennsylvania	8,000	1.4	11,000	29.20	321,000
Ohio	100,000	1.0	100,000	28.20	2,820,000
Indiana	75,000	1.0	75,000	27.30	2,048,000
Illinois	140,000	1.5	210,000	25.40	5,334,000
Michigan	72,000	1.4	101,000	27.50	2,778,000
Wisconsin	124,000	2.0	248,000	26.60	6,597,000
Minnesota	19,000	2.5	48,000	25.00	1,200,000
Iowa	60,000	1.4	84,000	26.70	2,243,000
Missouri	20,000	1.7	34,000	23.50	799,000
Nebraska	4,000	1.8	7,000	24.20	169,000
Kansas	6,000	1.8	11,000	19.00	209,000
Kentucky	20,000	1.9	38,000	29.70	1,129,000
Tennessee	4,000	1.5	6,000	25.70	154,000
Idaho	13,000	5.8	75,000	25.40	1,905,000
Oregon	6,000	3.0	18,000	29.80	536,000
Total	686,000	1.6	1,099,000	26.45	29,067,000
1918	820,000	1.5	1,197,000	19.80	23,705,000
1917	821,000	1.8	1,488,000	12.84	19,107,000
1916	939,000	1.8	1,706,000	9.18	15,661,000

APPLES.

TABLE 23—Apples: Production and prices, Dec. 1, by States, 1918 and 1919.

State	Apples							
	Total crop (000 omitted)		Commercial crop (000 omitted)		Price Dec. 1			
					Per bushel		Per barrel	
	1919	1918	1919	1918	1919	1918	1919	1918
	Bu.	Bu.	Bbls.	Bbls.	Dolls.	Dolls.	Dolls.	Dolls.
Maine	4,680	2,010	601	226	1.17	0.95	3,45	2.80
New Hampshire	1,510	1,155	187	122	1.60	1.10	4.70	3.20
Vermont	1,500	990	203	105	1.75	1.40	4.90	4.10
Massachusetts	3,240	2,430	335	300	2.00	1.60	4.90	4.20
Rhode Island	294	189	24	20	1.95	1.55	5.50	4.60
Connecticut	1,572	999	119	108	1.70	1.55	5.00	3.90
New York	16,800	40,878	2,975	5,950	2.00	1.12	5.66	3.65
New Jersey	2,313	2,463	587	514	2.00	1.60	5.80	4.60
Pennsylvania	7,972	16,080	759	1,116	2.25	1.20	6.25	3.40
Delaware	750	714	192	186	2.00	1.25	6.00	4.50
Maryland	1,944	2,034	226	315	2.00	1.10	6.00	3.00
Virginia	9,950	10,068	1,508	1,766	1.60	1.24	5.25	3.95
West Virginia	3,478	5,856	648	1,092	1.80	1.17	5.65	3.55
North Carolina	1,108	3,588	92	184	1.87	1.30	6.16	4.20
South Carolina	700	1,407	--------	--------	2.80	2.05	7.35	5.70

APPLES—Continued.

TABLE 23—Apples: Production and prices, Dec. 1, by States, 1918 and 1919—Continued.

State	Apples							
	Total crop (000 omitted)		Commercial crop (000 omitted)		Price Dec. 1			
					Per bushel		Per barrel	
	1919	1918	1919	1918	1919	1918	1919	1918
	Bu.	Bu.	Bbls.	Bbls.	Dolls.	Dolls.	Dolls.	Dolls.
Georgia	636	1,713	57	117	2.45	1.65	7.60	5.25
Ohio	2,806	7,005	364	902	2.62	1.53	7.50	4.64
Indiana	1,704	1,794	197	266	2.67	1.80	8.10	5.30
Illinois	4,943	3,459	750	837	2.30	1.85	7.00	6.00
Michigan	6,484	9,792	1,109	1,495	2.20	1.15	6.60	3.75
Wisconsin	2,087	2,811	126	114	2.20	1.55	6.30	4.80
Minnesota	1,365	996	61	40	2.50	2.09	7.40	6.11
Iowa	1,815	1,584	174	101	2.75	2.06	8.50	6.40
Missouri	5,773	4,245	1,127	735	1.90	1.64	5.70	5.10
South Dakota	302	273	3	3	3.00	2.35	9.00	6.80
Nebraska	1,125	525	215	72	2.50	2.30	8.00	7.00
Kansas	1,835	1,503	459	333	2.10	1.90	6.22	5.65
Kentucky	1,480	2,799	65	108	2.50	1.70	7.60	5.00
Tennessee	1,560	4,050	87	218	2.25	1.56	7.00	4.50
Alabama	617	1,662	10	26	2.50	1.70	7.50	6.00
Texas	624	273	40	11	1.90	1.60	6.00	4.50
Oklahoma	1,512	660	43	17	1.75	2.01	5.40	6.00
Arkansas	4,250	1,290	1,010	241	1.70	1.40	6.00	4.20
Montana	1,289	792	124	75	1.75	2.10	--------	--------
Colorado	3,418	2,067	828	527	1.85	1.70	--------	--------
New Mexico	1,329	912	224	117	2.00	1.18	--------	--------
Arizona	154	138	16	15	2.25	2.40	--------	--------
Utah	779	786	121	163	1.70	1.40	--------	--------
Idaho	4,350	1,200	1,200	112	1.80	1.70	--------	--------
Washington	23,190	16,491	6,440	4,296	1.55	1.25	--------	--------
Oregon	5,579	3,384	1,357	671	1.40	1.10	--------	--------
California	8,640	6,560	1,511	1,127	1.45	1.30	--------	--------
United States	147,457	169,625	26,174	24,743	1.87	1.33	--------	--------

HORSES AND MULES.

TABLE 24—Horses and mules: Number and value on farms, Jan. 1, 1919 and 1920, by States.

State	Horses						Mules					
	Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—		Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—	
	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919
Maine	107	108	$154.00	$154.00	$ 16,478	$ 16,632	----	----	----	----	----	----
New Hampshire	40	41	144.00	145.00	5,760	5,945	----	----	----	----	----	----
Vermont	85	86	141.00	139.00	11,985	11,954	----	----	----	----	----	----
Massachusetts	52	54	155.00	157.00	8,060	8,478	----	----	----	----	----	----
Rhode Island	8	8	160.00	159.00	1,280	1,272	----	----	----	----	----	----
Connecticut	43	44	165.00	164.00	7,095	7,216	----	----	----	----	----	----
New York	560	565	141.00	139.00	78,960	78,535	7	7	$148.00	$139.00	$ 1,036	$ 973
New Jersey	88	89	150.00	143.00	13,200	12,727	4	4	171.00	167.00	684	668
Pennsylvania	560	570	123.00	124.00	68,880	70,680	46	46	141.00	129.00	6,486	5,934
Delaware	34	35	83.00	92.00	2,822	3,220	6	6	111.00	122.00	666	732
Maryland	168	171	102.00	104.00	17,136	17,784	25	25	134.00	133.00	3,350	3,325
Virginia	362	369	108.00	109.00	39,096	40,221	65	66	136.00	138.00	8.840	9,108
West Virginia	192	194	104.00	101.00	19,968	19,594	12	12	121.00	115.00	1,452	1,380
North Carolina	183	181	153.00	146.00	27,999	26,426	236	225	190.00	176.00	44,840	39,600
South Carolina	80	80	180.00	180.00	14,400	14,400	206	200	231.00	206.00	47,586	41,200
Georgia	132	131	159.00	156.00	20,988	20,436	351	344	216.00	200.00	75,816	68,800
Florida	60	60	140.00	129.00	8,400	7,740	40	39	196.00	177.00	7,84	6,903
Ohio	873	891	109.00	107.00	95,157	95,337	28	28	120.00	117.00	3,36	3,276
Indiana	821	829	101.00	103.00	82,921	85,387	93	94	128.00	125.00	11,90	11,750
Illinois	1,422	1,467	94.00	100.00	133,668	146,700	147	147	125.00	125.00	18,37	18,375
Michigan	640	660	95.00	105.00	60,800	69,300	4	4	99.00	106.00	39	424
Wisconsin	680	694	109.00	109.00	74,120	75,646	3	3	112.00	111.00	33	333
Minnesota	940	950	91.00	98.00	85,540	93,100	6	6	99.00	110.00	59	660
Iowa	1,505	1,536	89.00	95.00	133,945	145,920	71	70	121.00	113.00	8,59	7,910
Missouri	1,040	1,040	83.00	92.00	86,320	95,680	378	374	120.00	116.00	45,36	43,384
North Dakota	825	850	81.00	93.00	66,825	79,050	9	9	98.00	107.00	88	963
South Dakota	819	827	71.00	80.00	58,149	66,160	15	16	94.00	99.00	1,41	1,584
Nebraska	1,018	1,049	75.00	87.00	76,350	91,263	106	109	109.00	109.00	11,55	11,881
Kansas	1,153	1,153	79.00	94.00	91,087	108,382	260	260	117.00	114.00	30,42	29,640
Kentucky	429	439	101.00	104.00	43,329	45,656	231	231	126.00	127.00	29,10	29,337
Tennessee	353	357	113.00	116.00	39,889	41,412	278	278	139.00	140.00	38,642	38,920
Alabama	158	155	128.00	128.00	20,224	19,840	316	304	171.00	157.00	54,036	47,728
Mississippi	261	258	113.00	113.00	29,493	29,154	322	316	152.00	139.00	48,944	43,924
Louisiana	215	215	107.00	97.00	23,005	20,855	166	164	164.00	145.00	27,224	23,780
Texas	1,199	1,164	96.00	78.00	115,104	90,792	784	792	140.00	115.00	109,760	91,080
Oklahoma	729	744	83.00	83.00	60,507	61,752	288	288	120.00	110.00	34,560	31,680
Arkansas	266	269	97.00	93.00	25,802	25,017	324	315	132.00	123.00	42,768	38,745
Montana	518	575	60.00	84.00	31,080	48,300	5	5	80.00	99.00	400	495
Wyoming	225	235	53.00	77.00	11,925	18,095	4	4	90.00	106.00	360	424
Colorado	427	419	79.00	91.00	33,733	38,129	31	31	101.00	107.00	3,131	3,317
New Mexico	232	242	68.00	62.00	15,776	15,004	20	20	104.00	92.00	2,080	1,840
Arizona	132	136	70.00	71.00	9,240	9,656	10	10	106.00	112.00	1,060	1,120
Utah	145	148	78.00	83.00	11,310	12,284	2	2	73.00	78.00	146	156
Nevada	75	77	60.00	62.00	4,500	4,774	3	3	64.00	72.00	192	216
Idaho	270	276	77.00	89.00	20,790	24,564	4	4	91.00	98.00	364	392
Washington	303	303	92.00	92.00	27,876	27,876	20	20	106.00	108.00	2,120	2,160
Oregon	282	303	85.00	89.00	23,970	26,967	10	10	91.00	93.00	910	930
California	400	435	94.00	91.00	37,600	39,585	59	63	122.00	125.00	7,198	7,875
United States	21,109	21,482	94.39	98.45	1,992,542	2,114,897	4,995	4,954	147.10	135.83	734,779	672,922

CATTLE.

TABLE 25—Cattle: Number and value on farms Jan. 1, 1919 and 1920, by States.

State	Milk Cows						Other Cattle					
	Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—		Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars) Jan. 1—	
	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919
Maine	179	175	$79.00	$70.50	$ 14,141	$ 12,338	143	142	$35.90	$36.10	$ 5,134	$ 5,126
N. Hampshire	103	105	86.00	80.00	8,858	8,400	70	70	41.70	39.80	2,919	2,786
Vermont	278	281	89.00	72.00	24,742	20,232	190	190	37.20	31.20	7,068	5,928
Massachusetts	159	160	105.00	94.00	16,695	15,040	102	100	44.80	36.30	4,570	3,630
Rhode Island	20	20	110.00	101.00	2,200	2,020	14	13	46.90	40.10	657	521
Connecticut	118	115	105.00	94.00	12,390	10,810	80	76	47.70	41.90	3,816	3,184
New York	1,493	1,478	107.00	89.00	159,751	131,542	909	900	48.30	41.00	43,905	36,900
New Jersey	153	150	128.00	100.00	19,584	15,000	77	74	57.00	51.30	4,389	3,796
Pennsylvania	970	960	98.00	85.00	95,060	81,600	727	720	46.00	40.70	33,442	29,304
Delaware	46	44	85.00	76.00	3,910	3,344	24	23	46.80	42.80	1,123	984
Maryland	180	177	89.00	80.00	16,020	14,160	138	135	50.40	45.60	6,955	6,156
Virginia	437	424	76.00	69.00	33,212	29,256	578	567	49.20	46.40	28,438	26,309
West Virginia	250	243	76.00	71.00	19,000	17,253	384	366	51.70	50.30	19,853	18,410
N. Carolina	328	315	78.00	69.00	25,584	21,735	394	379	35.30	31.90	13,908	12,090
S. Carolina	211	203	85.00	78.00	17,935	15,834	249	244	36.50	34.40	9,088	8,394
Georgia	461	452	65.00	65.00	29,965	29,380	771	763	27.20	27.30	20,971	20,830
Florida	156	149	72.00	61.00	11,232	9,089	945	936	27.30	24.80	25,798	23,213
Ohio	1,061	1,030	92.00	83.50	97,612	86,005	1,113	1,102	48.70	47.30	54,203	52,125
Indiana	724	713	88.00	85.00	63,712	60,605	764	780	51.60	52.40	39,422	40,872
Illinois	1,060	1,060	96.00	90.00	101,760	95,400	1,290	1,340	54.60	54.00	70,434	72,360
Michigan	873	848	96.00	83.00	83,808	70,384	773	750	42.80	38.90	33,084	29,175
Wisconsin	1,846	1,792	97.00	82.00	179,062	146,944	1,493	1,436	40.20	37.00	60,019	53,132
Minnesota	1,395	1,368	82.00	78.00	114,390	106,704	1,730	1,632	32.60	33.50	56,398	54,672
Iowa	1,353	1,381	88.00	86.00	119,064	118,766	2,775	2,861	49.00	52.60	135,975	150,489
Missouri	919	919	79.00	74.00	72,601	68,006	1,746	1,782	48.90	49.40	85,379	88,031
North Dakota	464	451	77.00	80.00	35,728	36,080	617	636	41.40	47.60	25,544	30,274
South Dakota	561	561	75.00	82.00	42,075	46,002	1,526	1,496	44.30	53.90	67,602	80,634
Nebraska	601	620	83.00	85.00	49,883	52,700	2,911	2,940	45.30	49.90	131,868	146,706
Kansas	935	964	81.00	81.00	75,735	78,084	2,161	2,401	48.00	52.70	103,728	126,533
Kentucky	457	452	73.00	72.00	33,361	32,544	580	610	41.20	42.50	23,896	25,925
Tennessee	384	380	70.00	66.00	26,880	25,080	593	587	32.80	34.30	19,450	20,134
Alabama	502	494	57.00	58.00	28,614	28,652	842	851	22.90	24.30	19,282	20,679
Mississippi	571	549	62.00	60.00	35,402	32,940	716	695	23.50	26.70	16,826	18,556
Louisiana	378	363	67.00	58.00	25,326	21,054	725	690	29.30	26.80	21,242	18,492
Texas	1,138	1,094	77.00	63.00	87,626	68,922	4,458	4,287	41.80	36.80	186,344	157,762
Oklahoma	550	561	68.00	68.00	37,400	38,148	1,300	1,444	41.70	44.20	54,210	63,825
Arkansas	452	443	56.00	59.00	25,312	26,137	691	678	24.40	24.70	16,860	16,747
Montana	180	197	83.00	87.00	14,940	17,139	936	1,170	50.60	58.90	47,362	68,913
Wyoming	82	80	93.00	95.00	7,626	7,600	787	1,100	50.50	61.80	39,744	67,980
Colorado	272	264	87.00	88.00	23,664	23,232	1,355	1,425	48.10	54.40	65,176	77,520
New Mexico	87	84	83.00	75.00	7,221	6,300	1,378	1,325	45.50	42.90	62,699	56,842
Arizona	57	72	95.00	90.00	5,415	6,480	1,200	1,100	44.00	43.00	52,800	47,740
Utah	109	106	78.00	82.00	8,502	8,692	518	503	39.30	48.10	20,357	24,194
Nevada	35	31	88.00	94.00	3,080	2,914	535	569	45.00	47.00	24,075	26,743
Idaho	136	136	85.00	82.00	11,560	11,152	537	537	44.10	48.90	23,682	26,259
Washington	228	228	88.00	75.00	20,064	17,100	298	307	43.80	37.60	13,052	11,543
Oregon	224	222	83.00	66.00	18,592	14,652	708	703	46.20	44.80	32,710	31,494
California	571	561	97.00	79.00	55,387	44,319	1,634	1,650	51.40	48.20	83,988	79,530
United States	23,747	23,475	85.13	78.20	2,021,681	1,835,770	44,485	45,085	43.15	44.22	1,919,445	1,993,442

SHEEP AND WOOL.

TABLE 26—Sheep: Number and value on farms Jan. 1, 1919 and 1920, by States.

State	Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars Jan. 1—	
	1920	1919	1920	1919	1920	1919
Maine	180	173	$ 9.50	$ 11.10	$ 1,710	$ 1,920
New Hampshire	39	38	9.80	12.00	382	456
Vermont	105	107	11.50	12.70	1,208	1,359
Massachusetts	30	28	12.70	12.50	381	350
Rhode Island	6	7	12.20	12.50	73	88
Connecticut	29	24	12.80	13.30	371	319
New York	824	800	12.40	13.90	10,218	11,120
New Jersey	30	29	11.00	13.20	330	383
Pennsylvania	939	930	11.60	11.70	10,892	10,881
Delaware	10	10	10.40	10.30	104	103
Maryland	250	246	10.90	11.30	2,725	2,780
Virginia	714	700	11.50	12.50	8,211	8,750
West Virginia	772	766	10.60	11.70	8,183	8,962
North Carolina	144	138	9.50	8.70	1,368	1,201
South Carolina	27	29	7.10	6.50	192	188
Georgia	125	135	4.90	5.80	612	783
Florida	107	105	5.20	4.10	556	430
Ohio	3,010	2,980	10.10	11.00	30,401	32,780
Indiana	1,089	1,078	11.80	13.90	12,850	14,984
Illinois	1,010	1,000	12.60	14.20	12,726	14,200
Michigan	2,224	2,119	11.80	12.50	26,243	26,488
Wisconsin	687	680	10.80	12.40	7,420	8,432
Minnesota	668	642	11.00	13.20	7,348	8,474
Iowa	1,321	1,270	12.00	13.70	15,852	17,399
Missouri	1,525	1,495	11.90	13.20	18,148	19,734
North Dakota	286	265	11.00	12.60	3,146	3,339
South Dakota	850	810	10.00	12.20	8,500	9,882
Nebraska	323	294	11.10	11.90	3,585	3,499
Kansas	506	460	11.60	12.80	5,870	5,888
Kentucky	1,236	1,274	10.90	13.10	13,472	16,689
Tennessee	584	556	10.50	11.80	6,132	6,561
Alabama	137	140	5.60	6.40	767	896
Mississippi	175	180	6.30	6.60	1,102	1,188
Louisiana	230	230	5.40	5.20	1,242	1,196
Texas	2,790	2,232	9.90	9.40	27,621	20,981
Oklahoma	131	125	11.10	11.80	1,454	1,475
Arkansas	201	161	7.40	8.20	1,487	1,320
Montana	2,791	2,984	10.30	11.80	28,747	35,211
Wyoming	3,200	4,000	10.20	12.30	32,640	49,200
Colorado	2,121	2,209	9.80	10.90	20,786	24,078
New Mexico	2,538	2,820	9.30	8.50	23,603	23,970
Arizona	1,300	1,400	9.60	10.00	12,480	14,000
Utah	2,245	2,223	9.80	11.00	22,001	24,453
Nevada	1,596	1,520	10.30	11.80	16,439	17,936
Idaho	3,234	3,234	10.40	12.20	33,634	39,455
Washington	757	780	11.00	11.80	8,327	9,204
Oregon	2,547	2,497	11.00	12.00	28,017	29,964
California	2,972	2,943	10.80	12.00	32,098	35,316
United States	48,615	48,866	10.52	11.63	511,654	568,265

SHEEP AND WOOL—Continued.

TABLE 27—Wool: Estimated production, 1918 and 1919.

State	Production (000 omitted)		Weight per fleece		Number of fleeces (000 omitted)	
	1919	1918	1919	1918	1919	1918
	Pounds	Pounds	Pounds	Pounds	Number	Number
Maine	936	883	6.4	6.7	146	132
New Hampshire	202	192	6.6	7.0	31	27
Vermont	690	663	7.2	7.2	96	92
Massachusetts	125	119	6.6	6.0	19	20
Rhode Island	25	24	5.8	6.0	4	4
Connecticut	84	76	5.9	5.5	14	14
New York	4,022	3,830	7.0	7.0	575	547
New Jersey	92	88	7.0	5.5	13	16
Pennsylvania	5,013	4,774	7.0	6.7	716	713
Delaware	31	31	5.7	5.7	5	5
Maryland	812	773	6.0	5.8	135	133
Virginia	1,962	1,800	5.0	4.7	392	383
West Virginia	2,943	2,830	5.3	5.2	555	544
North Carolina	587	570	4.4	4.0	133	142
South Carolina	103	103	4.3	4.0	24	26
Georgia	422	418	3.1	2.9	136	144
Florida	460	426	3.5	3.2	131	133
Ohio	13,104	12,600	7.5	7.3	1,747	1,726
Indiana	5,337	4,765	7.4	7.1	721	671
Illinois	4,129	4,048	8.0	8.0	516	506
Michigan	9,554	8,765	7.4	7.4	1,291	1,184
Wisconsin	3,306	2,850	7.6	7.6	435	375
Minnesota	3,594	3,209	7.5	7.4	479	434
Iowa	5,060	4,600	8.0	7.5	632	613
Missouri	7,614	7,183	7.1	7.0	1,072	1,026
North Dakota	1,654	1,560	7.7	7.6	215	205
South Dakota	5,222	4,747	7.5	7.4	696	641
Nebraska	1,730	1,696	7.9	7.8	219	217
Kansas	1,754	1,624	7.6	7.6	231	214
Kentucky	3,211	3,058	5.2	4.9	618	624
Tennessee	2,052	1,954	4.8	4.6	428	425
Alabama	405	368	4.2	3.5	96	105
Mississippi	656	619	4.2	4.0	156	155
Louisiana	612	594	3.9	3.7	157	161
Texas	14,986	11,800	7.2	7.0	2,081	1,686
Oklahoma	526	511	7.0	6.8	75	75
Arkansas	422	402	4.9	4.9	86	82
Montana	17,751	18,685	8.4	8.2	2,113	2,279
Wyoming	33,415	32,760	8.5	8.4	3,931	3,900
Colorado	8,983	9,261	6.6	6.2	1,361	1,494
New Mexico	15,076	17,132	6.3	5.6	2,393	3,059
Arizona	5,236	5,630	6.3	6.1	831	923
Utah	15,800	15,800	7.4	7.7	2,135	2,052
Nevada	10,500	10,000	7.6	7.0	1,382	1,429
Idaho	22,145	21,500	8.4	7.9	2,636	2,722
Washington	5,779	5,504	8.6	8.6	672	640
Oregon	14,040	13,500	8.5	8.0	1,652	1,688
California	13,298	12,545	7.4	7.0	1,797	1,792
United States	265,460	256,870	7.4	7.1	35,979	36,178
Pulled wool	48,300	42,000	----------	----------	----------	----------

SWINE.

TABLE 28—Swine: Number and value on farms Jan. 1, 1919 and 1920, by States.

State	Number (thousands) Jan. 1—		Average price per head Jan. 1—		Farm value (thousands of dollars Jan. 1—	
	1920	1919	1920	1919	1920	1919
Maine	116	110	$ 24.50	$ 24.00	$ 2,842	$ 2,640
New Hampshire	67	66	24.00	25.00	1,608	1,650
Vermont	120	120	22.50	23.00	2,700	2,760
Massachusetts	176	147	27.00	26.00	4,752	3,822
Rhode Island	16	15	30.00	28.00	480	420
Connecticut	100	83	27.50	27.00	2,750	2,241
New York	920	800	22.50	26.00	20,700	20,800
New Jersey	210	200	25.20	30.30	5,292	6,060
Pennsylvania	1,420	1,380	23.70	26.00	33,654	35,880
Delaware	73	71	19.00	19.50	1,387	1,384
Maryland	461	427	19.00	21.00	8,759	8,967
Virginia	1,127	1,094	15.00	18.00	16,905	19,692
West Virginia	443	439	18.00	18.50	7,974	8,122
North Carolina	1,592	1,546	20.00	21.00	31,840	32,466
South Carolina	1,088	1,056	21.50	21.00	23,392	22,176
Georgia	3,165	3,043	16.90	17.50	53,488	53,252
Florida	1,588	1,512	13.00	13.00	20,644	19,656
Ohio	4,351	4,266	19.20	21.80	83,539	92,999
Indiana	4,760	4,668	19.00	23.30	90,440	108,764
Illinois	5,323	5,724	20.50	25.00	109,122	143,100
Michigan	1,450	1,355	22.00	23.60	31,900	31,978
Wisconsin	2,236	2,070	23.50	26.50	52,546	54,855
Minnesota	2,951	2,784	24.00	28.50	70,824	79,344
Iowa	10,389	10,822	21.80	27.50	226,480	297,605
Missouri	4,305	4,629	16.50	18.50	71,032	85,636
North Dakota	428	475	21.00	24.70	8,988	11,732
South Dakota	1,730	1,730	21.50	27.50	37,195	47,575
Nebraska	3,366	3,825	20.90	26.50	70,349	101,362
Kansas	1,667	2,381	17.50	21.50	29,172	51,192
Kentucky	1,681	1,768	13.00	16.00	21,853	28,288
Tennessee	1,946	1,965	15.00	16.50	29,190	32,422
Alabama	2,201	2,223	12.80	17.00	28,173	37,791
Mississippi	2,396	2,282	14.50	16.00	34,742	36,512
Louisiana	1,512	1,575	14.30	15.20	21,622	23,940
Texas	2,356	2,320	19.50	17.00	45,942	39,440
Oklahoma	943	1,036	15.10	16.70	14,239	17,301
Arkansas	1,586	1,725	12.50	13.00	19,825	22,425
Montana	160	200	20.00	22.00	3,200	4,400
Wyoming	63	70	18.40	21.50	1,159	1,505
Colorado	382	406	18.00	22.00	6,876	8,932
New Mexico	83	87	21.80	19.00	1,809	1,653
Arizona	50	58	18.00	18.00	900	1,044
Utah	114	133	15.00	20.20	1,710	2,687
Nevada	32	40	14.00	18.00	448	720
Idaho	187	208	17.80	19.60	3,329	4,077
Washington	292	317	23.30	22.00	6,804	6,974
Oregon	314	330	19.50	19.10	6,123	6,303
California	973	1,003	18.00	18.00	17,514	18,054
United States	72,909	74,584	19.01	22.02	1,386,212	1,642,598

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